Supplementary Table S1. Hyperparameter search space used for optimizing DNN, CNN, LSTM, and GRU models using Keras Tuner (200 trials per model).

Model	Hyperparameter	Search Space / Values
Common to All Models	Learning Rate	{1e-2, 5e-3, 1e-3, 5e-4, 1e-4}
	Optimizer	{Adam, RMSprop, SGD}
	Dropout Rate	Continuous uniform: 0.1–0.5 with step of 0.05
	L2 Regularization	Log-uniform: 1e-5 – 1e-2
	Batch Size	{16, 32, 64}
	Epochs (per trial)	Fixed: 200 (early stopping enabled)
DNN	Number of Dense Layers	{1 - 4}
	Units per Layer	{ 32 – 256, with step 0f 32}
	Activation	{ReLU, tanh}
CNN	Number of Conv Layers	{1 - 4}
	Filters	{16 – 256, with step of 16}
	Kernel Size	{3, 5, 7}
	Pooling Type	{MaxPooling, AveragePooling}
	Dense Layer Size	{ 32 – 256, with step 0f 32}
LSTM	Number of LSTM Layers	{1 - 4}
	LSTM Units	{ 32 – 256, with step 0f 32}
	Return Sequences	{True, False}
	Bi-directionality	{Yes, No}
GRU	Number of GRU Layers	{1 - 4}
	GRU Units	{ 32 – 256, with step 0f 32}
	Return Sequences	{True, False}
	Bi-directionality	{Yes, No}

Supplementary Table S2. Best hyperparameter configurations selected by Keras Tuner (200 trials per model). These configurations were used for the final 10-fold cross-validation experiments reported in Table 5.

Model	Hyperparameter	Optimal Value (Best Trial)
DNN	Number of Dense Layers	2
	Units per Dense Layer	192, 224
	Activation Function	ReLU
	Dropout Rate	0.5
	L2 Regularization	6.44×10^{-4}
	Optimizer	Adam
	Learning Rate	5×10^{-4}
CNN	Number of Convolutional Layers	4
	Filters per Layer	176, 96, 48, 96
	Kernel Sizes	3, 5, 3, 3
	Pooling Type	Avg
	Dropout Rate	0.5
	L2 Regularization	2.58×10^{-5}
	Dense Layer Size	96
	Optimizer	Adam
	Learning Rate	5×10^{-4}
LSTM	Number of LSTM Layers	2
	Units per LSTM Layer	256, 96
	Return Sequences	True (layer 1), False (layer 2)
	Bidirectional Layer	Yes
	Dropout Rate	0.25
	L2 Regularization	1.33×10^{-5}
	Optimizer	Adam
	Learning Rate	5×10^{-4}
GRU	Number of GRU Layers	3
	Units per GRU Layer	64, 128, 256
	Return Sequences	True (layer 1), False (layer 2)
	Bidirectional Layer	No
	Dropout Rate	0.10
	L2 Regularization	5.01×10^{-5}

Optimizer	RMSprop
Learning Rate	1×10^{-2}

Supplementary Table S3. Ten-fold cross-validation metrics and McNemar test results for all models

Measure	CNN	LSTM	GRU	DNN
Training Time (sec)	67.9432	85.0876	114.2525	47.4344
ACC (Mean ± Std)	0.9418 ± 0.0174	0.9192 ± 0.0368	0.9207 ± 0.0265	0.9162 ± 0.0190
Sensitivity (Mean ± Std)	0.8882 ± 0.0403	0.8519 ± 0.0632	0.8504 ± 0.0536	0.8640 ± 0.0488
Specificity (Mean ± Std)	0.9864 ± 0.0195	0.9864 ± 0.0149	0.9909 ± 0.0106	0.9683 ± 0.0206
F1 Score (Mean ± Std)	0.9387 ± 0.0198	0.9123 ± 0.0423	0.9139 ± 0.0312	0.9109 ± 0.0229
MCC (Mean ± Std)	0.8799 ± 0.0316	0.8468 ± 0.0682	0.8507 ± 0.0468	0.8383 ± 0.0335
AUC (Mean ± Std)	0.9758 ± 0.0118	0.9590 ± 0.0205	0.9535 ± 0.0191	0.9463 ± 0.0254
PR-AUC (Mean ± Std)	0.9806 ± 0.0089	0.9691 ± 0.0148	0.9670 ± 0.0133	0.9612 ± 0.0152
TP (Sum)	588	564	563	572
TN (Sum)	653	653	656	641
FP (Sum)	9	9	6	21
FN (Sum)	74	98	99	90
N (Total)	1324	1324	1324	1324
McNemar b	Ref	43	39	50
McNemar c	Ref	19	17	22
McNemar n	Ref	62	56	72
McNemar p	Ref	3.20×10^{-3}	4.60×10^{-3}	1.30×10^{-3}

Training Time (sec) represents the wall-clock time required to train each model. ACC (Mean ± SD), Sensitivity (Mean ± SD), Specificity (Mean ± SD), F1 Score (Mean ± SD), MCC (Mean ± SD), AUC (Mean ± SD), and PR-AUC (Mean ± SD) denote the mean and standard deviation of each metric across the 10 cross-validation folds. Sensitivity is defined as TP/(TP+FN) and specificity as TN/(TN+FP). MCC reflects balanced predictive correlation, whereas AUC and PR-AUC quantify discrimination under ROC and precision–recall curves, respectively. TP, TN, FP, and FN indicate the total counts of true positives, true negatives, false positives, and false negatives aggregated across all folds; N refers to the total number of predictions. McNemar's b, c, n, and p correspond to the pairwise McNemar comparison against the CNN model, where b = cases correct by CNN but incorrect by the comparator, c = cases incorrect by CNN but correct by the comparator, n = b+c, and p = the exact McNemar p-value. All metrics are computed across 10 folds to assess performance stability, class-wise behavior, and statistical agreement among models.

Supplementary Table S4. Comparative performance analysis of single and multi-feature representations for 5hmC site prediction.

Feature Set	Dim	ACC (mean ± SD)	Prec (mean ± SD)	Sens (mean ± SD)	Spec (mean ± SD)	MCC (mean ± SD)	F1 (mean ± SD)
PSTNPV	39	0.918 ± 0.019	0.938 ± 0.024	0.899 ± 0.060	0.938 ± 0.027	0.840 ± 0.032	0.916 ± 0.024
NoDV	84	0.551 ± 0.031	0.578 ± 0.027	0.392 ± 0.205	0.710 ± 0.169	0.111 ± 0.056	0.433 ± 0.158
SEQMAT	90	0.536 ± 0.015	0.608 ± 0.111	0.482 ± 0.313	0.589 ± 0.313	0.109 ± 0.048	0.448 ± 0.197
Raw	90	0.585 ± 0.033	0.649 ± 0.096	0.535 ± 0.255	0.634 ± 0.280	0.198 ± 0.061	0.529 ± 0.136
Central	90	0.576 ± 0.020	0.618 ± 0.109	0.544 ± 0.196	0.608 ± 0.210	0.172 ± 0.056	0.543 ± 0.097
Hahn	90	0.570 ± 0.022	0.561 ± 0.031	0.703 ± 0.176	0.437 ± 0.177	0.157 ± 0.046	0.610 ± 0.070
OneHot	164	0.542 ± 0.045	0.462 ± 0.235	0.371 ± 0.270	0.713 ± 0.225	0.092 ± 0.090	0.381 ± 0.238
APRIV	168	0.560 ± 0.045	0.578 ± 0.050	0.430 ± 0.209	0.690 ± 0.168	0.125 ± 0.089	0.457 ± 0.189
LRIM	180	0.548 ± 0.021	0.580 ± 0.092	0.609 ± 0.251	0.486 ± 0.293	0.123 ± 0.053	0.547 ± 0.106
TWO-FEATURE COMBINATIONS							
PSTNPV + NoDV	123	0.921 ± 0.016	0.922 ± 0.037	0.923 ± 0.018	0.920 ± 0.043	0.844 ± 0.032	0.922 ± 0.014
PSTNPV + SEQMAT	129	0.920 ± 0.020	0.924 ± 0.022	0.915 ± 0.028	0.925 ± 0.022	0.840 ± 0.040	0.919 ± 0.020
PSTNPV + Raw	129	0.927 ± 0.027	0.941 ± 0.038	0.912 ± 0.048	0.941 ± 0.039	0.856 ± 0.053	0.925 ± 0.029
PSTNPV + Central	129	0.926 ± 0.023	0.946 ± 0.034	0.905 ± 0.040	0.947 ± 0.034	0.854 ± 0.047	0.924 ± 0.025

PSTNPV + Hahn	129	0.924 ± 0.022	0.960 ± 0.031	0.888 ± 0.052	0.961 ± 0.033	0.854 ± 0.041	0.921 ± 0.025
NoDV + SEQMAT	174	0.541 ± 0.017	0.533 ± 0.018	0.716 ± 0.120	0.365 ± 0.141	0.091 ± 0.037	0.605 ± 0.036
NoDV + APRIV	252	0.548 ± 0.036	0.549 ± 0.034	0.454 ± 0.273	0.641 ± 0.228	0.099 ± 0.073	0.442 ± 0.228
SEQMAT + APRIV	258	0.541 ± 0.016	0.541 ± 0.023	0.579 ± 0.125	0.503 ± 0.124	0.085 ± 0.034	0.550 ± 0.063
NoDV + LRIM	264	0.545 ± 0.017	0.544 ± 0.025	0.720 ± 0.303	0.370 ± 0.278	0.123 ± 0.042	0.568 ± 0.184
SEQMAT + LRIM	270	0.560 ± 0.020	0.578 ± 0.057	0.553 ± 0.140	0.568 ± 0.173	0.129 ± 0.047	0.547 ± 0.061
LRIM + APRIV	348	0.536 ± 0.023	0.580 ± 0.098	0.636 ± 0.325	0.435 ± 0.340	0.093 ± 0.051	0.523 ± 0.197
PSTNPV + Raw	129	0.927 ± 0.027	0.941 ± 0.038	0.912 ± 0.048	0.941 ± 0.039	0.856 ± 0.053	0.925 ± 0.029
PSTNPV + Central	129	0.926 ± 0.023	0.946 ± 0.034	0.905 ± 0.040	0.947 ± 0.034	0.854 ± 0.047	0.924 ± 0.025
PSTNPV + Hahn	129	0.924 ± 0.022	0.960 ± 0.031	0.888 ± 0.052	0.961 ± 0.033	0.854 ± 0.041	0.921 ± 0.025
THREE-FEATURE COMBINATIONS							
PSTNPV + NoDV + SEQMAT	213	0.921 ± 0.019	0.924 ± 0.041	0.920 ± 0.015	0.921 ± 0.046	0.843 ± 0.039	0.921 ± 0.017
PSTNPV + NoDV + APRIV	291	0.922 ± 0.018	0.923 ± 0.014	0.921 ± 0.034	0.923 ± 0.015	0.845 ± 0.035	0.922 ± 0.019
PSTNPV + NoDV + LRIM	303	0.916 ± 0.015	0.930 ± 0.022	0.900 ± 0.015	0.932 ± 0.022	0.833 ± 0.031	0.915 ± 0.015
PSTNPV + SEQMAT + APRIV	297	0.922 ± 0.016	0.926 ± 0.025	0.918 ± 0.036	0.926 ± 0.027	0.846 ± 0.033	0.922 ± 0.017
PSTNPV + SEQMAT + LRIM	309	0.916 ± 0.019	0.938 ± 0.018	0.891 ± 0.034	0.941 ± 0.018	0.834 ± 0.038	0.914 ± 0.022
NoDV + SEQMAT + APRIV	342	0.535 ± 0.016	0.544 ± 0.026	0.561 ± 0.214	0.510 ± 0.241	0.077 ± 0.027	0.529 ± 0.084
NoDV + SEQMAT + LRIM	354	0.570 ± 0.015	0.626 ± 0.082	0.476 ± 0.229	0.664 ± 0.241	0.169 ± 0.048	0.498 ± 0.108
NoDV + LRIM + APRIV	432	0.554 ± 0.024	0.566 ± 0.026	0.561 ± 0.269	0.545 ± 0.255	0.122 ± 0.037	0.517 ± 0.170
SEQMAT + LRIM + APRIV	438	0.545 ± 0.023	0.609 ± 0.125	0.417 ± 0.284	0.674 ± 0.243	0.114 ± 0.053	0.413 ± 0.219
FOUR-FEATURE COMBINATIONS							
PSTNPV + NoDV + SEQMAT + LRIM	393	0.918 ± 0.020	0.924 ± 0.030	0.912 ± 0.029	0.925 ± 0.031	0.838 ± 0.041	0.918 ± 0.020
PSTNPV + NoDV + SEQMAT + APRIV	381	0.922 ± 0.019	0.912 ± 0.037	0.937 ± 0.018	0.908 ± 0.042	0.846 ± 0.036	0.924 ± 0.017
PSTNPV + NoDV + LRIM + APRIV	471	0.912 ± 0.016	0.939 ± 0.030	0.884 ± 0.022	0.941 ± 0.030	0.827 ± 0.033	0.910 ± 0.016
PSTNPV + SEQMAT + LRIM + APRIV	477	0.784 ± 0.147	0.797 ± 0.137	0.752 ± 0.208	0.816 ± 0.141	0.572 ± 0.289	0.765 ± 0.177
NoDV + SEQMAT + LRIM + APRIV	522	0.554 ± 0.023	0.606 ± 0.064	0.376 ± 0.222	0.732 ± 0.213	0.130 ± 0.055	0.427 ± 0.127
PSTNPV + Raw + Central + Hahn	309	0.867 ± 0.123	0.875 ± 0.122	0.852 ± 0.148	0.882 ± 0.107	0.736 ± 0.246	0.862 ± 0.132

FIVE-FEATURE COMBINATION (MAXIMUM SET)							
PSTNPV + NoDV + SEQMAT + LRIM + APRIV	561	0.928 ± 0.022	0.916 ± 0.034	0.944 ± 0.035	0.912 ± 0.038	0.858 ± 0.045	0.929 ± 0.022

Supplementary Table S5. Results demonstrating the probabilities (Original Proba / Original Class) with original sequence and probabilities after k-mer shuffling of sequence (Shuffled Proba / Shuffled Class)

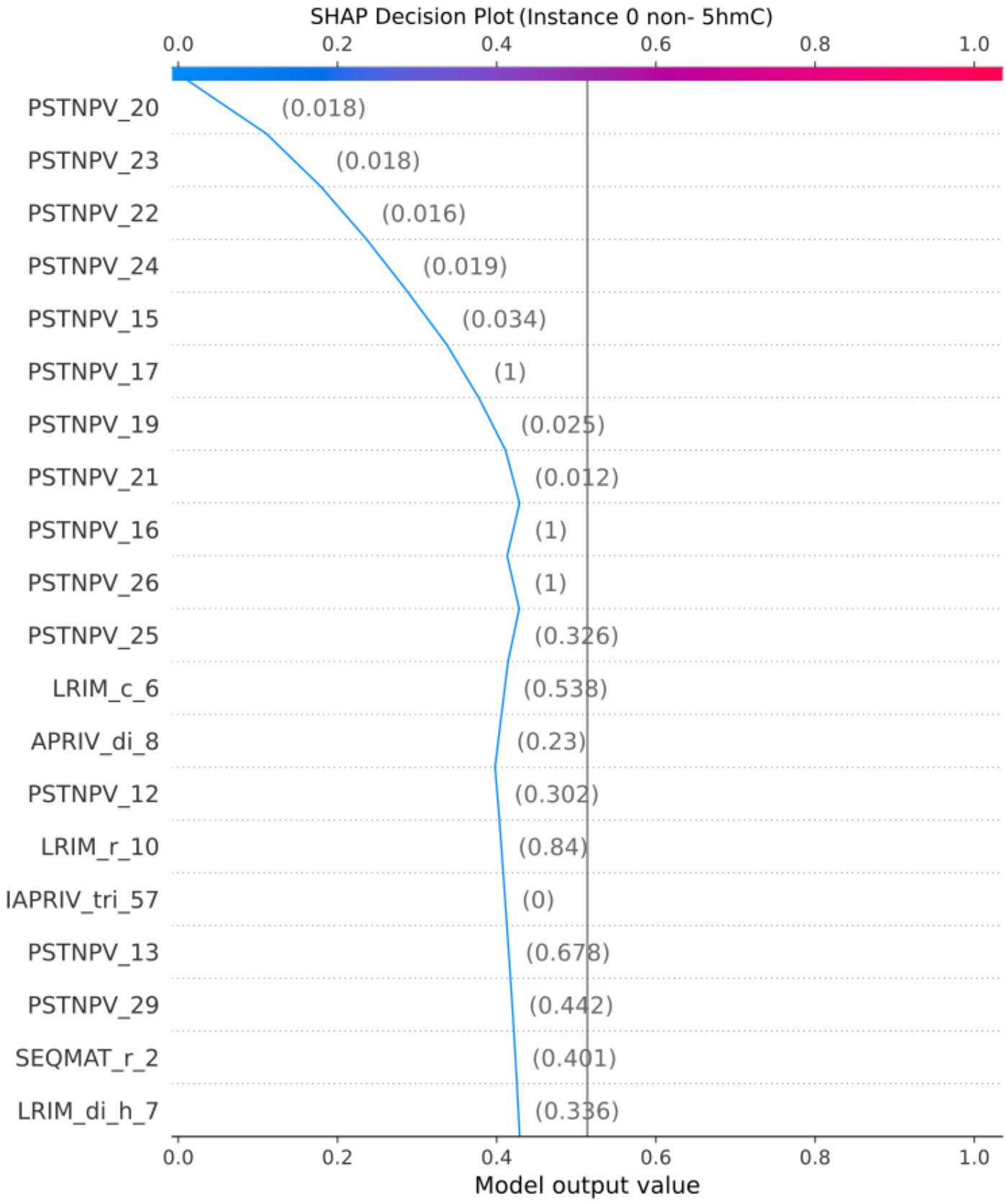
Seq_ ID	Original Sequence	True Label	Original Proba	Original Class	K	Shuffled Sequences	Shuffled Proba	Shuffled Class
pos_ 7	CAAUGGAACCCUGGGAAGGACGUC CUGUAUCUCAACCUAAA	1	0.8135	5hmC	3	CUGCUAGUCGACAAAACAAGAACU AUCCUGGGCAAUGGCUC	0.9826	5hmC
pos_ 15	CUUUGCCAAUGAAGGGAUUUCUUG GCACUUUAUACCCCCGU	1	0.9829	5hmC	3	CAAGAUUUGCUUUUCACCAGGCCC GCAUAUUGAUGCGUCUU	0.1503	Non-5hmC
pos_ 22	CACAUCACCCAAAUAUUUUACGAC AUUAUGACCAGGGAAAA	1	0.6696	5hmC	3	GACAUUCAAAGGACCAAAUCGAAU UUUACACCCACAUAAUG	0.7515	5hmC
pos_ 25	AGACCCAACGUUCUGCACACCUGG AGCAAUCGAUGUCAUUG	1	0.9065	5hmC	3	ACCUGAACUGUGUUAGCCGAUGGA GACUGAAUCAUCACCCC	0.9547	5hmC
pos_ 26	AGACUGAGAAUGAACCUCUGCUUC AUUUUCGCCUGCUGACG	1	0.4419	Non-5hmC	3	AACAUUUGCAGAUUCUGAAGACUG AUGUGCCUCUUCGCCCG	0.4569	Non-5hmC
pos_ 37	GAAAAUCAAUAUCAAAUUGACGAA AACAACCAAAAUUUACA	1	0.9613	5hmC	3	CAAGAAUAUAACUUAAAUAACCAA AUUGAACAAGACAAUCA	0.9134	5hmC
pos_ 43	CUGUUGUCGCAAGAGAAGUACAUA GAAUCCUUAUUAGCCAC	1	0.7024	5hmC	3	CUGUACAAGUUGGAGGCCACAUAU UACAAGAAUCGUUAUCC	0.9872	5hmC
pos_ 64	UUAGAGUUAGAGUAACCUCUCUUU GAAUACAUUACAUGAUU	1	0.9210	5hmC	3	AUUUAAGAAUUUGAGUACUUACUC CCUACAGAGUUAUGAUU	0.8555	5hmC
pos_ 71	CAUGGUUCAUGAUUACAGGCCUUA AAUCCCAAGUCUUUUAG	1	0.9120	5hmC	3	CAUGGUUCUAAUAGCCCCAGUGAU UUUUAUCAUUAAAGGCC	0.8900	5hmC
pos_ 72	AAACAGACGGUACCCCUUAGCCGC UAUUGAAUAUCCAAUCA	1	0.9514	5hmC	3	AUACCCCACAGUCCAAUAAACGCU AUACGGUACUUAGCUGA	0.4938	Non-5hmC
pos_ 86	CAAUCGAUCAGUGGAAACCGCGAA GAGGUAUUGCUAUUGCA	1	0.9799	5hmC	3	CACAAAACAUCGAAAGUGGAGAGC UAUCGGUACGCUUGUUG	0.0685	Non-5hmC
pos_ 126	GUAGAGAAUACAUUGAAAUUCUUG GGGGCCAGAGACUGCUA	1	0.9750	5hmC	3	UUGUUCGCCUGCACAAAUGUAAAA UUGGGGUAGAGGACAGA	0.2105	Non-5hmC
pos_ 129	UAAGGGACAAGAAUUUUUUGCGGA UCCCCCACGCGUUGAUG	1	0.9274	5hmC	3	UGAAGAUAAGGACCCUUUUGCGGG ACGACAUCCAUUUGCGU	0.6320	5hmC
pos_ 141	GAAAUAGCUAUCUGCAGCAGCAAC UGGGAGGAGGAUCUACC	1	0.9999	5hmC	3	AUAAUCGAGUGCCCAGCGAGAACA GCGAAGAUUGGGCUCUA	0.9679	5hmC
pos_ 144	AGAAGAAGGCCCAAGAGGAUCGUG AAAAAAAGGAAAGAGAA	1	0.9950	5hmC	3	AGAGAGAAGAUCAAAGGAAAAGGA GGGUGAAAAGAAAACCC	0.8118	5hmC
pos_ 155	AAUAUCAUUUACUCAAAACACCCA GGUUGACAAGGAGCAUU	1	1.0000	5hmC	3	AUCAUUCCAAAUGCAUGACAAAAA CACUCAUUGGAGGUUAC	0.2141	Non-5hmC
pos_ 166	UCAUCGCCGGCCUCCGCUUCCUUU UCAUCUUCAUUGGAGCC	1	1.0000	5hmC	3	UUUCCGUCCCCGAGUCCUUGUCAG CCUCAUCUUCAGCUUCG	0.6202	5hmC
pos_ 178	AAACAUAUUUUUUUGUAAUACUGC AUUUCGCGUGAUAAUUG	1	1.0000	5hmC	3	AUUAAUAAAUCGUACCGUGAUUGC UUGUUUAUUCAUUAAUG	0.4377	Non-5hmC
pos_ 196	UCUCGUAACUCUCCACUAAUCACG AUCGCUUUUCCCAUCUG	1	1.0000	5hmC	3	GCUCCAAACUCUACGAUCCCCCUA UGUUUCGUUCUAUCAUC	0.9595	5hmC
pos_ 209	AGUCCCAGCAUUGCGAAGUUCGAG GCGUUCAGGCCGUUCUC	1	0.9985	5hmC	3	AGCUCAGGUUCGAGGCGUUCGCGA UUCCCAAGCCGUUCAGU	0.7960	5hmC
pos_ 215	UCUCUCUGUGCAGGCGGGCACAUU CACUGUGGGGCUGAAAA	1	0.9743	5hmC	3	UGUUGUGCUCACAAGGGUCUGGGC ACGAACUCGCAAUUGGC	0.5061	5hmC
pos_ 235	GACGAUGGAACGGCACAGAUCCUU AAUUGUUUAUAGCAACC	1	1.0000	5hmC	3	GCACCAAUCAGUUAUGUGAUGACC AAACGUAGCUUAUCGGA	0.1318	Non-5hmC
pos_ 252	CGCAUCCUCUUCUCCAAUUGCAGC CCCUACAACUAAACCUG	1	1.0000	5hmC	3	UACAAUACCUGCGCAUCAACUUCC UCAGCCCCUAAUGCUCC	0.4774	Non-5hmC
pos_ 254	CACCCAGAAGUGGCUGGUGGCCAA GUUCGGCAAGGAAACUU	1	0.9996	5hmC	3	GUGCAAGGUCCAGGCGCUAACGAA GGAGUUCAACGGUUCAC	0.6208	5hmC
pos_ 264	GGAAGAGAGCCCGAAAGACCCCAU ACAUAUAGUUCUAACAU	1	0.9111	5hmC	3	UCUAGAAUGAGACACAUGAAGGAA ACUAUAGACCCCCCAGU	0.8160	5hmC
pos_ 276	GAUGAGAAUCCACUUAACGCCCUC AAUAGUGGGGAUUCCCA	1	0.9985	5hmC	3	AGUGAUGAGCACUCAAUUCCAAUG CCCUUCCAAACGAUGGG	0.8254	5hmC
pos_ 279	AUUAGGGUGUAUCUAAAGAUCUAC UAGGGUGACCCUAAGGA	1	0.9934	5hmC	3	AUCAAGGAAAGUAGGUGCUAUAUG ACAGGCCUGGUUACAUU	0.2921	Non-5hmC
pos_ 281	CCGGCCCAUAUCGAAGGGUUCGUA GAUGAUGACAUUGCGGC	1	1.0000	5hmC	3	UUCGCCAUCGACAUUGAUGCCCGG CGGAUGUACAUGAAGGG	0.2100	Non-5hmC
pos_ 282	UGUUUUGCUUGGUGUAGGAACACA CGGUUGCCACCUGAUGC	1	1.0000	5hmC	3	UGUUGGAACAGGUUGGAUACACCA UGUGCUCGGCCUGCUUU	0.2173	Non-5hmC
pos_ 297	GUGGACAGGCGCUGCAAUCGCCUG GCUCCUGUUUGGAGGAC	1	0.9966	5hmC	3	AAUCGCAGGCCUAGGACGUUUGGC GCGACGUGUGCCUGGCU	0.0690	Non-5hmC

pos_313	AACCCAAAAAGGACAAAAAACGAGAUCAAAAUAUUGAAACU	1	0.9999	5hmC	3	CUAGGACAAAACCAAAAAAAAACAUAAACAUCGAGUUGAAA	0.3277	Non-5hmC
pos_316	CUGCGUGCCGCCACUCAACUCUUCAUCUCUGGAGAGGCCGC	1	0.8721	5hmC	3	GCCGCCGGAAUCGCUUCCGUUCUGAGCAAACUCUGGCCCUC	0.2465	Non-5hmC
pos_319	AUUUAUUUGAGGUAAGUACACGUAUUUCACUUUAAAUAAGU	1	1.0000	5hmC	3	GUAGUAUAAUUUUUUUAUAUUCACGUUAAAGGUUGAAACAC	0.0339	Non-5hmC
pos_336	GGCAGGAAGAGAGAAUAGGACAAGUUAAACAAGUUACAAAA	1	0.9925	5hmC	3	AAUUAUAGCAAAGAAACAAGAAGGGCGACAGGUUAAAGGAA	0.1887	Non-5hmC
pos_356	GUAUAAAUGUGUUUAAUUAGCCUCCUUCUCUUUCCCCAAAA	1	1.0000	5hmC	3	CUUUAACCCCUCAUGCAACUCUUAAUUAGCAAUUUGUAUGU	0.0897	Non-5hmC
pos_357	CGGACGGACAGACAAACGGACGGAGGUGCGGCAGCUACAAC	1	0.9999	5hmC	3	AGAGCGGCUGACACGGAACAGACCAAACGCGGACGGGUGCA	0.6827	5hmC
pos_367	GGGAAUGGUAGUCUGGUUACCCAACUUUUCGAUUGUGCGGU	1	1.0000	5hmC	3	GAUGCGGGGGGUCAACUGAGUAAUCUUUUCACCGUUGUGUU	0.4825	Non-5hmC
pos_381	AUUUAGUUAAUUAAUUAAUUCCAUAAGUGCAGGGUUUUGCU	1	0.9992	5hmC	3	UAGCAUUGCAAUUUAGUUCUUUCUAAAUUAGGUUGAAGAUU	0.2022	Non-5hmC
pos_387	CGGUUUUGAGACCAGCUUUCCAGGAAUAAAAAUGUAUGGAG	1	1.0000	5hmC	3	AGGGACCGGUUUAAUUGAAGAAACUUUCCUGGAAUCAGGUA	0.1224	Non-5hmC
pos_390	GCCCAGACCCACCUGGCUGGCGUUGUUCACCUUAGCGCGCA	1	0.9993	5hmC	3	CACCAGGCUGUUAGCGCCGUUGCGCUGCACACCCAGGCCUU	0.4315	Non-5hmC
pos_393	UUUUUUUUUUUGCCGCAAAACCAUAGAGGUGUGUAGCGGCG	1	0.9989	5hmC	3	CCGUUUUUUAACUUUUAGUUGAGACAUCAAGUGCGGGUCGG	0.3188	Non-5hmC
pos_398	UGCGGUGCCCAACAAAUUGCCCGGCAAAACAGUGUCGGUGC	1	0.9990	5hmC	3	CAAGUCUGCGCGCCCGGGCCGGUAUUAACCAACAAGGUAGU	0.0347	Non-5hmC
pos_431	AAGCCGGUAGGGCGCGUGUGCGGAGAACAGCUGUUGCGAAG	1	1.0000	5hmC	3	CGAUGCGUAGAACGCGUGUUGCUGCCGCAGGGAGGGAGAAG	0.8202	5hmC
pos_454	CCAACAAUUAAGGAGCAGCCCACUCGGGAUACCCCUCAUCCU	1	0.9991	5hmC	3	CAGCCCAUACUCGAGCUCGGAUCACACCAAUUAAGCCCACU	0.4126	Non-5hmC
pos_456	CAAUACAAAGAAACCAGUAACAGAAAAAUGCGUCCUGGAAA	1	0.9991	5hmC	3	CAAGGACGUAUGACCGAAAACAGUAAACCUAAAAGAUACAA	0.3805	Non-5hmC
pos_466	UUUCAGUCCCGCUUCAAAACCUCUAUCAGUGUUUUAGAUUU	1	1.0000	5hmC	3	UUUUUAAACAGAUCGUUACCAGUCGCUUCGAUUCUUUAUCC	0.5478	5hmC
pos_468	UCUAGGCGCAGGAGAUUUAACAAAUAUAUCUUUAGGGACAG	1	1.0000	5hmC	3	CGCUUUAAAAACAGUCUAUCUAUUUUGACAGGAGAAGGAGG	0.1552	Non-5hmC
pos_471	UUCUCCUUUGUUUUCAAGGACUUCACACAUUCGUCUGGGAA	1	0.9855	5hmC	3	CAUUUCUUCAAGUCGUUCGGGACAGACUCCGUUAAUUUUCU	0.9843	5hmC
pos_478	CAUGCGUUUCCUGACCCCCUCACUGGUCGGGACAUAAAUUU	1	1.0000	5hmC	3	GACGGUGCGCCUCCCUUUGACACUAUACAUCGGAAUCUCUU	0.6212	5hmC
pos_490	AAAACGAAACGGGAGGAGAGCACGUGCUUAAAUUUAGUUUA	1	0.9995	5hmC	3	UUAUGCUUAACGGUUGAGAAAAAUAAAUAAGCGAGCGGACG	0.0929	Non-5hmC
pos_497	CUAUAGUUCCUAUAGAACCACUUGGCUAUAUGCAAAUUAGU	1	0.9993	5hmC	3	UAGUUCUUAUGCUUGCUAAACUAGAAAGUCACCUAGCUAUA	0.9377	5hmC
pos_503	AUAAUUACAGUAAUUAGAUGCAAGGCAAACGUCAAAAGCCC	1	1.0000	5hmC	3	CCAUAAUUAACACAGUCAGCGCAAAAAAGGUAAGAUGCAUU	0.2646	Non-5hmC
pos_508	AUCAAAAUUAAAAUAAGAAUCUCAUCGCUCAGCCGCAGAUA	1	0.9917	5hmC	3	AAAAUUUAAUAAUCCUCAGCAAAAGAAGAUCGCGCAUCUCA	0.1410	Non-5hmC
pos_513	AAGGGGCAGUGAAAUGGGCGCUGAAUGGGGGGGUUAAAAAG	1	1.0000	5hmC	3	CGCAUGUUAGGGAAUAAAGGGUGAGGGUGACAGGGGAAGAG	0.7598	5hmC
pos_515	AUCGUGGCGUGAACACUAAGCGCCUGUGGGCCACGCUACGG	1	0.9999	5hmC	3	UGAAGCUGUGGACAAUCGCCCGCGUGCCAGGGGCGCUAUAC	0.7187	5hmC
pos_534	AUUAUAUCAUGUGGCCAAGACGUUGGUGUGGUUUUUGGUUG	1	1.0000	5hmC	3	GUUGGUUGAUUGGCUCACAAGUUGGUGUGAUAUGUUUUGAC	0.7410	5hmC
pos_542	UACCACCUCACUGCCGCCGACUGGUUUUUAAAACGCCGCGG	1	1.0000	5hmC	3	GCCCUCCGCCGCUGGACUUACUUACACGGAAAGACUUUGCC	0.7323	5hmC
pos_561	AUAAAAAUUAACUCGUCGAGCUGAAAAGUUACGGGGGGCCC	1	0.9984	5hmC	3	AUAAAAAAAUCGAACGUUGGCUCGCCAGCAUUGGGUGAACG	0.0410	Non-5hmC
pos_562	CGUCUGGUGCCCAAGGGCCCCUUUAACAUCACCAUCGGUGA	1	1.0000	5hmC	3	GAAUCCGUGUGAACCCCACCAUCGGUUUUAAGCUGCCCGGC	0.6634	5hmC
pos_580	GCGGUUUUUAGGCUUAGCCCCAGCGACGCCGCCGACUGUUU	1	1.0000	5hmC	3	GUUGCGGCCGACGCCCCCGACCUUUGUAGGAGCUUUAGCUU	0.4885	Non-5hmC
pos_583	ACCUCGAAAUACGCGGUGUGCGAUUAUUUGGCCAAACUUCC	1	1.0000	5hmC	3	AAAAAAACCGCGUUGCCGUGGCCGAUUGCCUUUCGUACUAU	0.1334	Non-5hmC
pos_588	CUAUCGGAUUCGGAAAUGCCCGUUCGGGGGGUAUAAAAGCG	1	1.0000	5hmC	3	CUAUCGCGGGUAGAUUAAGGGGUUAUGCGAAGCCCUCGGAA	0.1669	Non-5hmC
pos_595	CCCACUAACUCUUAGUCUGACUUUUUGUUUCUAAGCAAAAA	1	0.9796	5hmC	3	UUGAAAGACAACACUAACCCUCUUUUCUAUAGUUUAGCUCU	0.9580	5hmC
pos_619	AAGCAAAUAAGUAACUUAGACGUAAAUACUCCUCCCUACGU	1	0.9548	5hmC	3	CCUGACUACUUAAUACAAAAGACUAAUAACGUACCCGUAGU	0.2122	Non-5hmC
pos_627	AGCAGCGCAAACAAAACGACCAAGGAGCCGGCAAAAGUAGG	1	1.0000	5hmC	3	ACCAACACGAGCCCGGCAAAGGUAGGGCAGAGAAAAGCAAA	0.4220	Non-5hmC
pos_632	GAUUUACACUGCCAAGGUAUCCAUAGGGAGUGGAGUAGUAG	1	0.9996	5hmC	3	UGCUGGGGUAUCAGUAGCACAGGAGUCAUCAAGAGGAUUUA	0.3305	Non-5hmC
pos_645	CCUCGCCUUUAUUUCUAAUACUUUCUAAAUCUCUUUCUUCA	1	1.0000	5hmC	3	UUUUAAUAUCUACUCUUCAAUCUUCCUCUUUUUUACCGCCA	0.0063	Non-5hmC
neg_678	UCAAACUUUUCGGCCAAGUUCAGAAUUUGGCUUAAUUUGCG	0	0.1835	Non-5hmC	3	GCCUCAAACAAGUUUAGACGAAUUCGCUUUGGUUCUUGAUU	0.2049	Non-5hmC

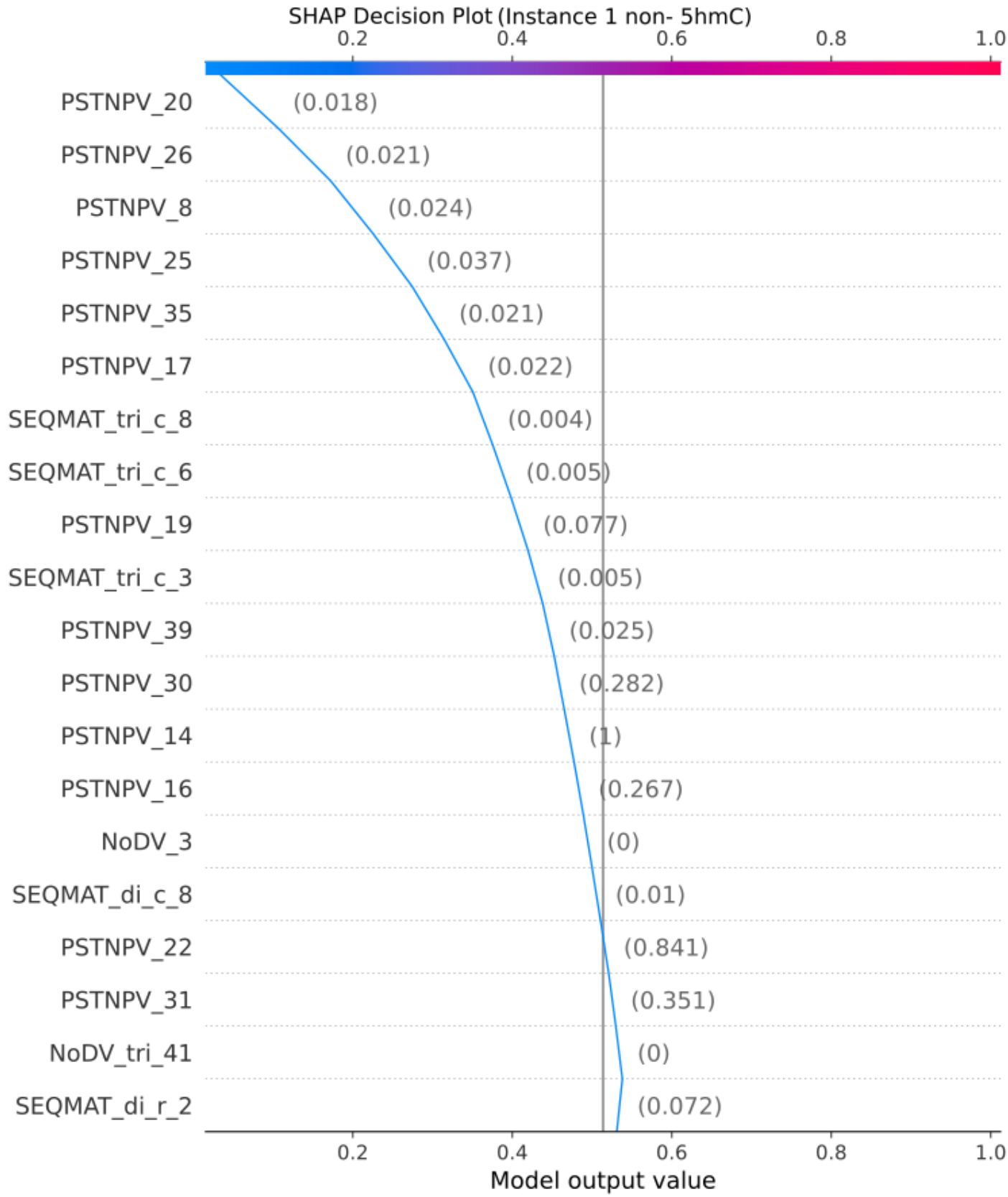
neg_685	UUCUUACAGUUUUAUUGACUCUUU AAAUCUUAUAACAACCC	0	0.0673	Non-5hmC	3	AAACAGCCUUCUGACUCUUUAACU AUUAUUUUUUAAACUCU	0.5161	5hmC
neg_693	GAUAGUGUGGGAGAUCGUGUCCGC AAGAAGUGCUUCCGCCU	0	0.6778	5hmC	3	CUAAGUGCGGACGUGUGAGUGAUG AUCGCAAGUUCCGCGUC	0.1105	Non-5hmC
neg_695	CUCCGUCGAUGGCCAAACAGCCGA AAAACCACUCGCGCGCC	0	0.1178	Non-5hmC	3	AAACGCCUCCGAAACCGACCCGUA GCUGGACCACUGCGCCA	0.4427	Non-5hmC
neg_700	GAGGGCGGAGUGGUCCUAAUCGAU CGGGGGGAGUGAUCUCA	0	0.3073	Non-5hmC	3	AUCCGGGGCCUAUCUGUGCAGAUU GAGAGGGGGUCGGAGAG	0.1068	Non-5hmC
neg_701	AAUAAAAAAAUCCCAUUACCACCGG AGAGGUUAUCUUCGUUU	0	0.1171	Non-5hmC	3	UCCUUAAAAGACGUCUUUAUCAUU ACCACAAUGGUAAACGG	0.6537	5hmC
neg_702	UCGCCCCCUUAAAAUAACAACGCC UGCACCCCAAGGUGGAU	0	0.0308	Non-5hmC	3	AGGAACUGGAACUAAAUCCCAAUC CAUGCGCCCCUUCGACC	0.4272	Non-5hmC
neg_707	ACAAGGCAUAUCACUUUUUUCUCC GAUCAUUUUUUGGAAUG	0	0.5538	5hmC	3	ACACAUACUGAUGAAUCCAUCUUU CAUAGGUUGUGUUCUUU	0.1391	Non-5hmC
neg_719	GUGGCGGUCAGGCCGUGAUUCUCG UAUGUGCCCCGGGGCCG	0	0.0246	Non-5hmC	3	CGGCCGGUGAGGCCCUUCGUCUGA GCGUCGGUGUAUGGCCG	0.0647	Non-5hmC
neg_723	GGACUCCCCACACAGCGUUGCUUU UGUUUUAAUUAUGAAAC	0	0.4871	Non-5hmC	3	CCCCUCACUUUUAUGAACAGCGUA CAGGAUGCUUUUGUAAU	0.0652	Non-5hmC
neg_731	CACACACCGGGGCACACACACAAA UGCACCUCGCGGAGAUG	0	0.0522	Non-5hmC	3	AGAACCGGGCACUGCGGACACACA CAUCGAAACACCCGUGC	0.3394	Non-5hmC
neg_736	ACUUUGAAGUCCAGCGAGGUCUGG ACCCCCCAAAUCACACU	0	0.4670	Non-5hmC	3	ACUACAAGCAAGCAACUGAGCCCU GGAUCUCCUUGGUCACC	0.0183	Non-5hmC
neg_757	AUUAGAGCGUGUUGCAGGUGCACU GUUUUUGGGGAAAAGGG	0	0.2600	Non-5hmC	3	UUUGGAUUAGGUGCAGAGGGGCGG UUGAAUGUAAGACUUGC	0.7823	5hmC
neg_758	UGGAAAGCGGAACGUGUAAACUGU UUUGACUCGUCCUGCCC	0	0.0499	Non-5hmC	3	GACAAAUGUGAAUCCUCGGCGUGG CGUUUUGUAAACCCUGC	0.5531	5hmC
neg_765	CUUUUCCCGACAUACCCUCCCUCAC CUGGAUGACCUCACCC	0	0.0289	Non-5hmC	3	CUUCACUGAUACUUCCCGACACCC GGACCCCUCCUUCACCU	0.7634	5hmC
neg_768	CGCCCGGAGGAGACUUCCGCCGCC AUUCAAUUCAAAUAUCG	0	0.5718	5hmC	3	ACUGAGUUCAUUCCGCAACGAAAG CCUCCCGCGCCUAUGAG	0.7443	5hmC
neg_772	GAGUUUUCAGCAUGGUAUUUCGGG UUAAACCAACCAUGUAA	0	0.5188	5hmC	3	UGGUUCUCAGCAAACCAGAGUGUC AAGGGUUUUAUAACUUA	0.1033	Non-5hmC
neg_783	UCGAUUUGCGCCGGGCUCUGCGGA GAGCUUUUGGCUUUAAU	0	0.0235	Non-5hmC	3	UCGUUGUUAGCCGCUUGCGAGAUU GCCUUCUCGGGGGAAUU	0.4777	Non-5hmC
neg_786	AUGUUCAACGAGUUAUAAAACCGA AACUCGGGGAAAACCCC	0	0.1070	Non-5hmC	3	AACAACCGAACCAAAUAAGGGUUA GAGUUCUCGAUGAACCC	0.1415	Non-5hmC
neg_789	CCCCUACCAAAGGUAAGGAACAGA GUAUAAAUAUAAAAAGC	0	0.1596	Non-5hmC	3	GCAAGCUAAUAAAAGUAAACAGGU AACCCGUAUAACCAAGA	0.9811	5hmC
neg_794	CAUCCCCCAGAGCGACCUGCCAGA GGUAAAGGGAGAAUUUA	0	0.0761	Non-5hmC	3	GGGCCUAGAAUUCGACAUCCCAGA UAAAAGCCGGUGAGCCA	0.5304	5hmC
neg_803	CUUUGGUGGGACCAGGCGUACAUU CGUGGAAAUAGUCAAGC	0	0.1427	Non-5hmC	3	UACCGUUGGAAUCUUGCGAGUCAA CAGGCGACUGGGGAAUU	0.8428	5hmC
neg_811	GCCCUCCAAUAUCUCCGUUCCCCCA UAGCUCCACAUCCCCA	0	0.0165	Non-5hmC	3	CAUGCCCCCAUACACAAUAUCCAU CCCUCGCUCGUCCCCUC	0.8920	5hmC
neg_828	UGUGGCGCCCCCGGAAGUAUCUCU UGCGAAAUAUUAGUGUG	0	0.0034	Non-5hmC	3	GGCUCUGUGGCCUGAUAUGUUGCG GAUUAAGUGAAAUCCCC	0.1988	Non-5hmC
neg_846	CUUUUUUUGUGCGCCCCCCACAUU GUUGGCCUAAUUGUUGC	0	0.0021	Non-5hmC	3	CACCUUGUUUUGCUAUUUGUUGCC CCUGCGCCAUUAUUGGC	0.1059	Non-5hmC
neg_847	GCUUUGGCUUAGUUCCUUUCCUUU UCCCUUUCCACACAUCC	0	0.1130	Non-5hmC	3	CUUUAGUCCCAUGCUUCCCUUUUU UUCGCUACACCUUGUCC	0.8688	5hmC
neg_855	UCGAGCCAUUAGCCUUUGAUCGCC CACACUUGGAAACUGGG	0	0.0381	Non-5hmC	3	UCGGCCACUAGCCACCUGCCUGGU GGUAGCAUAUCAAAUUG	0.8894	5hmC
neg_861	AGAUUUGCCAGAUAAAAGUACUAU CGCGAUGGCUUUUAGUA	0	0.0178	Non-5hmC	3	UAGGCAGAGCCAGAUACCGCGAUU AUUUUAAGUUUUAAUAG	0.5708	5hmC
neg_880	ACCACACCAGCUCCCGUUUUCGUG CAGAGAGUGACUACGAU	0	0.2555	Non-5hmC	3	GUGACUUUCAUCCAGCUAGAACGG UUGUGACACAGCCCACC	0.8047	5hmC
neg_908	AGAGUAUCCUUACGCUCUGUCCUU GAGGGGGGGGGGGGGG	0	0.0036	Non-5hmC	3	GGCGCGGGGUCUCCGGGGGGGUAU UAUCUGAGGGGAGACUU	0.0032	Non-5hmC
neg_911	GUGUCACAGACAUUUGUGUCCGUU UUGUGCCAACCCAAACC	0	0.0313	Non-5hmC	3	AAACAGGUGUCCCAAUUGCCCACA UGCUCAGUUUUUCCGUG	0.9783	5hmC
neg_913	UUUAACUACCAAGUGAAUGGCUUA AUUACGGCACACUUUUA	0	0.0338	Non-5hmC	3	AAUAUUUAUUUGCACAAGUGUUAA ACGGCUACUUUCACACG	0.9114	5hmC
neg_927	CCAUCAAUGUCGCUUUUGGCCCCC CUCCCACCAGUUUGCAG	0	0.0028	Non-5hmC	3	CCAGCCCUCCCAAUGGUUCUUCCA UCAUUGAGUGCCCCUCG	0.3304	Non-5hmC
neg_938	UAAAUAAACUCCGGCAAUUUCUAG UUUUACAACAGUGGUAU	0	0.0691	Non-5hmC	3	UACAGUAAUGGCAACAACUUCUUU UAAAUGGUUAGAUAUCC	0.2135	Non-5hmC
neg_955	UUUUAUUCCCCCCCAUUUUGCUUU ACACUUUAAUCUGGAAU	0	0.0052	Non-5hmC	3	UGCUUUUUUUUUCCAAUUCCUCUU AACUUCCCACAGGAUAU	0.5935	5hmC
neg_969	UUUGCGCCUAACGUUCUCCUCUAA AGUGCGUAUGUGUGUGU	0	0.0018	Non-5hmC	3	GUGAACCUCCUCGCGUAAUGUUAU UUUGCGGUGUUAGUCCU	0.7598	5hmC
neg_1001	GCCCUGUGUCACUCUCAAUACGGC CGAAAGGUAUCCGUCGA	0	0.2545	Non-5hmC	3	GACAAGGCGUCUCCGUACACAAGC UGCGAUACUGUGCCUCU	0.2950	Non-5hmC
neg_1020	GAGUUAAAUACUUUUUAGAGCGCA UCUUUUUUUUUUUUUGU	0	0.0071	Non-5hmC	3	GUAAUUUAACUAGCUUUUAGGCAU UUUCUUUUUUUGAGUUU	0.2295	Non-5hmC
neg_1022	ACAAGGGUCAGAAGGGUGAUCCCG GCCCAUACGGACAGCGU	0	0.1302	Non-5hmC	3	AUCGUCAGAGUACAGCCAGGGUGC AUAGCGACCCGAGGACG	0.8190	5hmC

neg_1033	GUUCGUAGUGUCCGUAGUAUCCGUGGUGUCCGUAUUGUACA	0	0.1099	Non-5hmC	3	CGUAGUGUCCGUGUAAGUGUUCAAUUCGUCGUGGUGUCAUC	0.6483	5hmC
neg_1046	CGCGUAUGUUGUACACGGGGCUGUAGACUCGGGCGGGUGAC	0	0.0944	Non-5hmC	3	CGGCGCGGGACAAGAACUGUGUACUCGUGUGUCGGGGCUGU	0.0093	Non-5hmC
neg_1049	AAGAGGCCGAAUGGAAUGAACAACUGGUAGAACCAAACUCG	0	0.1126	Non-5hmC	3	AAUACUGGAUGGCCGAUGAAGAACUAGCGCAAAGGAACAAC	0.1996	Non-5hmC
neg_1053	GUGGGACGACGCUGGGAGUGCUGGGGGGGGAGGAGUUGUG	0	0.0005	Non-5hmC	3	UGGCGAUGGUGCGCUGGGAGGAGUGCGGAGAGUUGGGGGGG	0.1581	Non-5hmC
neg_1067	AAUCCCUUAAGGGGUGCAUUCAACUAGCUAAAUGACGAACA	0	0.2263	Non-5hmC	3	GACUUCCAGGUAAUAAUGAAAACUUAAGGUAGCUACCCGCA	0.0808	Non-5hmC
neg_1074	CGCUCGCAUUCACCGUUAACCAAUUAGCAAAGGGUGACCAG	0	0.0809	Non-5hmC	3	GUGUCGACCAAUCAUUUACCGCGCAGGAGUAGACCUCACAA	0.2274	Non-5hmC
neg_1079	UAAGCACUCCUUUUUCCCUACUCCGGAAUGGUUUUUGCCCG	0	0.0063	Non-5hmC	3	AUGUCCGGACUUCGGCAUACCUCUAAGUUCCCUUUGCCUUU	0.9224	5hmC
neg_1082	AUAAGCCGGAGAUUAAUUGCCAUGUUUGGGGGGGGGGGGGG	0	0.0001	Non-5hmC	3	GGUUAAUUGGGCGGAUGGGGGCCAGAUUUAGCAUAGGGGGG	0.0056	Non-5hmC
neg_1087	UGUGUUUUUCCACGAAUAAACGCAAAAGGGGGUGAGGGGGA	0	0.0023	Non-5hmC	3	CCAGCAAACGGGAAACGAGGUUUUUGUGUUGAGGGAUAGAG	0.0200	Non-5hmC
neg_1096	AGGGGUUUGCUUGUUUAUGGCGAGCGGGUCAUAAAUUGAGG	0	0.0135	Non-5hmC	3	CUUUAUCGGUUGAGGGGGGUGUUUGAAAUGUCGAGGGCAUA	0.5398	5hmC
neg_1130	UUGAUAUAAGGGCUUUGUUGCGAGUGUCUGAAGUGUCCCUA	0	0.0801	Non-5hmC	3	UGUUAAUGUUGCGGGAUAUUGUAUGUGAGCUGCCCAAGCUU	0.1783	Non-5hmC
neg_1164	GAGUGCCAGUCCGGGGAACCCCAGGAUCCGCACAUCCGCAU	0	0.0247	Non-5hmC	3	AUCCCGCCCCAGGAUCGCGAGUGCGAACACAUCAGUCCGGG	0.3899	Non-5hmC
neg_1166	GGAAAUCCCUAAAAUGGGAACUAUAGUAAUUGAAAGUUAAU	0	0.0401	Non-5hmC	3	CCCUAUAAUAACGGAAAUUUAAAUGGGUGAAUUAAAAGAGU	0.1842	Non-5hmC
neg_1168	CUUGUGUAUUUUGGUUUUUACGUUGUUUACAUCCCUGGUUG	0	0.0075	Non-5hmC	3	GUUGGUUGGGUUUUCUUUAUGUUAUCCCUUACUACUUUGUG	0.9386	5hmC
neg_1169	UAUUCUAUAUAAAUUGGGAGCGGUGUUGAUAUUUCCACCAA	0	0.0013	Non-5hmC	3	GUUUAUAUAAUUAUUUAAUCCAAAGCUCUGGGGGUGAUACC	0.2927	Non-5hmC
neg_1170	AGCGUCUAGCGCGAUUUCUACACCCCCCCGCCAAAAGUCAA	0	0.0301	Non-5hmC	3	CCCACCCCGGUCAAGUCAGCUAGCCACGCUUCAAAGAUUAC	0.9858	5hmC
neg_1172	CUCAGCUAUUACUUCGAUUACUAAUUUGAUUUUUAGGUCUC	0	0.0079	Non-5hmC	3	GUCCUCUUUGAUUAAUACGAUUUCUCAGCUACUAUUUUUAG	0.3569	Non-5hmC
neg_1205	CCAGAUUCAAAUUGGCGAAUCGUUGGUACUUGGGGUUGAGA	0	0.0039	Non-5hmC	3	UGGCCAAAUGAUGAGGUAUCCGAACUGGUGUUUGGUGAUCA	0.5083	5hmC
neg_1207	AGUCAAAUAAAGCUGGCCAACAAAAGGAUUGUUUACCCGCC	0	0.0669	Non-5hmC	3	AACCCGCAAAAGAUAAGGAUUGCCAGUUACCUGGUUCCAAA	0.5085	5hmC
neg_1217	CCCCCAAUACCACUGUGCCUCCAAAUGGGUGAGUGGGUUGG	0	0.0005	Non-5hmC	3	AUACAAGGUGGGUUUGGCCACUCAUGGAGCCACUGUGCCCC	0.1826	Non-5hmC
neg_1227	AUUUACCGACCAUUCGGGGUCCAGAAUGAAAGAAAAACAAU	0	0.2666	Non-5hmC	3	CCAAUUUCUACGUCACAAGAAAAAUUCGAAAUCAGGAAGGG	0.7749	5hmC
neg_1232	AGAGAGGGAGAGAGUAAGAUCAAUUGGGUGGGGGAGACCCG	0	0.0103	Non-5hmC	3	CGAGAGAGAGUGAGAUCGUGAAGGGAGGGUGGACCAAUGAG	0.4709	Non-5hmC
neg_1240	CUCAGGGGGAAAGAGACUACCCAACAAUUCCUUGGGUCCAC	0	0.1553	Non-5hmC	3	ACCCUCCAAGGGAAACAAGAGUUCGGGAGGACUACCUUUCC	0.2661	Non-5hmC
neg_1298	CGUGAUUGGUGGGCGGGGGGCGAAAUGAUGAGAAACCCCAA	0	0.0074	Non-5hmC	3	GAACGUAACCCCUGGGGCAUGGCGAAUGGAGAAUGGAUGGG	0.4784	Non-5hmC
neg_1303	UUUUUUCCGAAGUGUACCGACUGGAACAGGAUUCUCGAAAA	0	0.3963	Non-5hmC	3	AAUGGUUUGAAAAGCUCAGGUUUCCGACCAUUGACAACUGU	0.5505	5hmC
neg_1305	CCCAGGAGGGGGACCUCCACCACCGCCCAUGAUGAUGGGGC	0	0.0397	Non-5hmC	3	GAUCAUGCGGGCCCACCAGGGCCGAUACCUCCGGGAGGACC	0.0009	Non-5hmC
neg_1308	AAGAUUGUGAUUUUAAAUGUCUUUGGGUCCCGUAAAACGGU	0	0.0188	Non-5hmC	3	AAGAUUUUUACGUUAGGGAUUGUGUCAAAGUGUCCAAUCGU	0.3804	Non-5hmC
neg_1316	UUUUUUACAUCCGUCGUGUUCUAAACUGUGCUAGACAACAG	0	0.1761	Non-5hmC	3	ACUAGACAUUUGUGGACAACGUCUAAUCCCUAGUGUUCUUU	0.2911	Non-5hmC

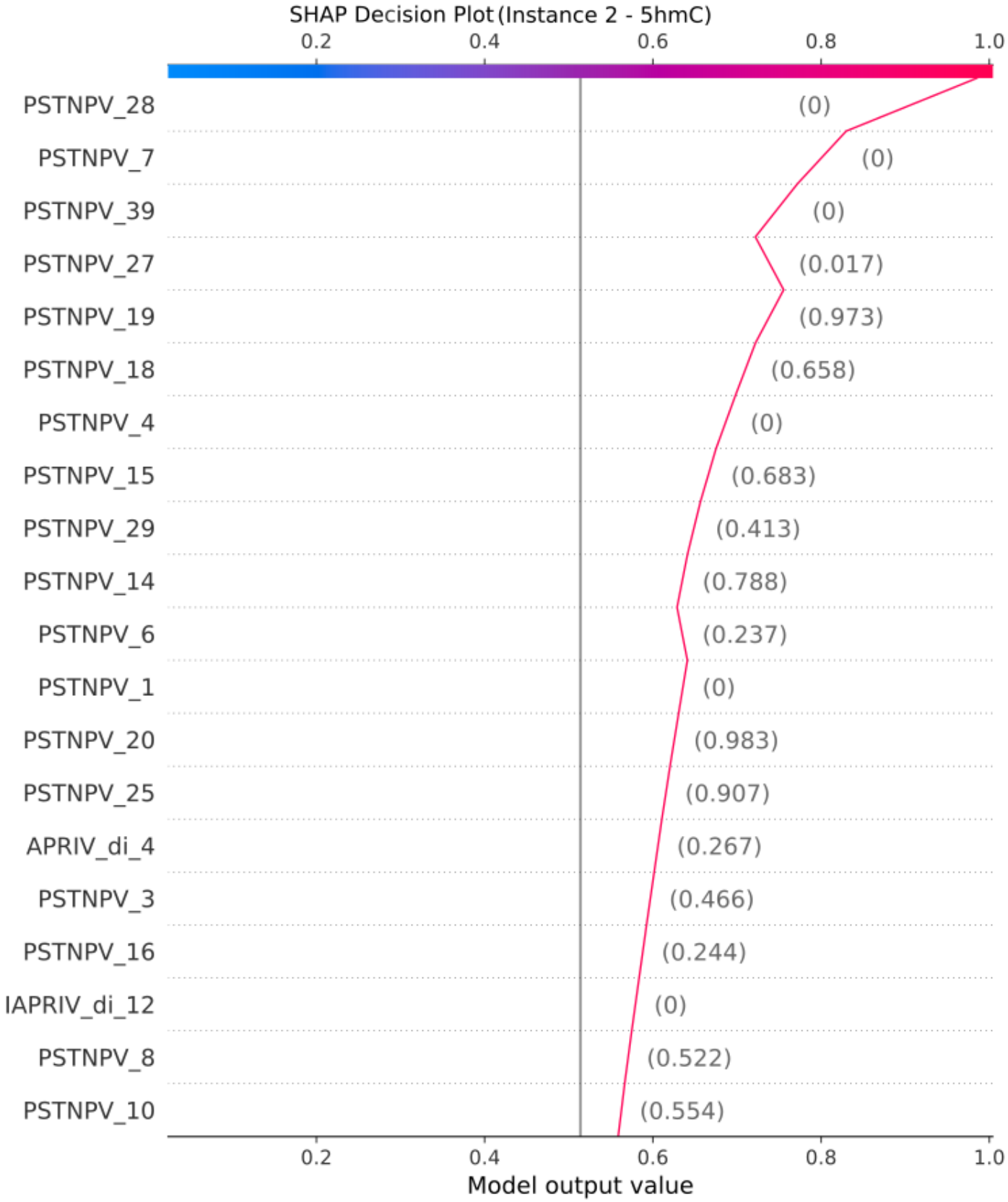
Supplementary Figure S1. SHAP decision plot for negative instance 1



Supplementary Figure S2. SHAP decision plot for negative instance 2



Supplementary Figure S3. SHAP decision plot for positive instance 3



Supplementary Figure S4. SHAP decision plot for positive instance 4