A

PRMT6 WT (Coverage 44%)

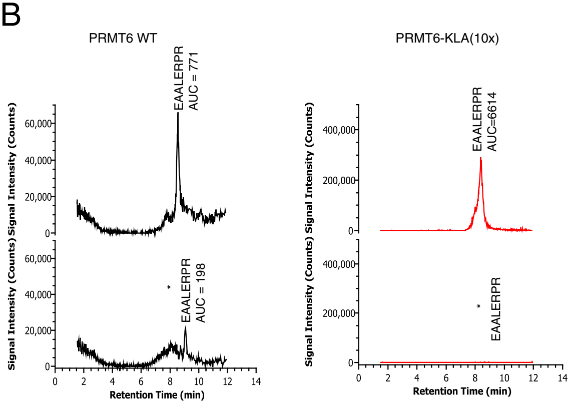
```
                              *      * *
MSQPKKRKLE SGGGGEGGEG TEEEDGAERE AALERPRRTK RERDQLYYEC YSDVSVHEEM IADRVRTDAY RLGILRNWAA

LRGKTVLDVG AGTGILSIFC AQAGARRVYA VEASAIWQQA REVVRFNGLE DRVHVLPGPV ETVELPEQVD AIVSEWMGYG
LLHESMLSSV LHARTKWLKE GGLLLPASAE LFIAPISDQM LEWRLGFWSQ VKQHYGVDMS CLEGFATRCL MGHSEIVVQG
LSGEDVLARP QRFAQLELSR AGLEQELEAG VGGRFRCSCY GSAPMHGFAI WFQVTFPGGE SEKPLVLSTS PFHPATHWKQ
ALLYLNEPVQ VEQDTDVSGE ITLLPSRDNP RRLRVLLRYK VGDQEEKTKD FAMED
```

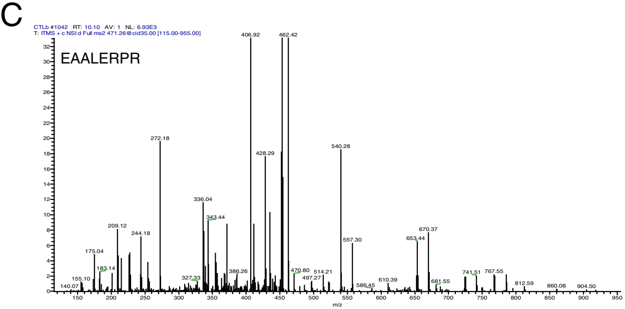
PRMT6 WT + SAM (Coverage 57%)

```
                              *      * *
MSQPKKRKLE SGGGGEGGEG TEEEDGAERE AALERPRRTK RERDQLYYEC YSDVSVHEEM IADRVRTDAY RLGILRNWAA

LRGKTVLDVG AGTGILSIFC AQAGARRVYA VEASAIWQQA REVVRFNGLE DRVHVLPGPV ETVELPEQVD AIVSEWMGYG
LLHESMLSSV LHARTKWLKE GGLLLPASAE LFIAPISDQM LEWRLGFWSQ VKQHYGVDMS CLEGFATRCL MGHSEIVVQG
LSGEDVLARP QRFAQLELSR AGLEQELEAG VGGRFRCSCY GSAPMHGFAI WFQVTFPGGE SEKPLVLSTS PFHPATHWKQ
ALLYLNEPVQ VEQDTDVSGE ITLLPSRDNP RRLRVLLRYK VGDQEEKTKD FAMED
```

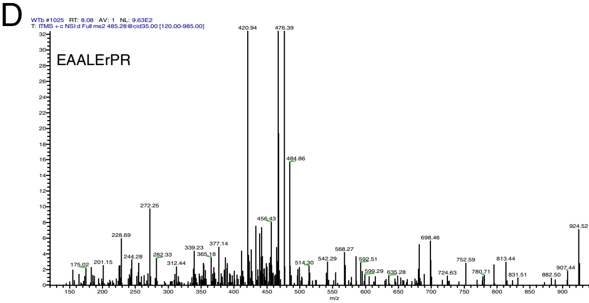
PRMT6$_{\text{KLA + SAM}}$(10x) (Coverage 52%)

```
MSQPKKRKLE SGGGGEGGEG TEEEDGAERE AALERPRRTK RERDQLYYEC YSDVSVHEEM IADRVRTDAY RLGILRNWAA

LRGKTKLAVG AGTGILSIFC AQAGARRVYA VEASAIWQQA REVVRFNGLE DRVHVLPGPV ETVELPEQVD AIVSEWMGYG
LLHESMLSSV LHARTKWLKE GGLLLPASAE LFIAPISDQM LEWRLGFWSQ VKQHYGVDMS CLEGFATRCL MGHSEIVVQG
LSGEDVLARP QRFAQLELSR AGLEQELEAG VGGRFRCSCY GSAPMHGFAI WFQVTFPGGE SEKPLVLSTS PFHPATHWKQ
ALLYLNEPVQ VEQDTDVSGE ITLLPSRDNP RRLRVLLRYK VGDQEEKTKD FAMED
```





#1	b^{+}	b^{2+}	Seq.	y^{+}	y^{2+}	#2
1	130.04988	65.52858	E			8
2	201.08700	101.04714	A	812.47376	**406.74052**	7
3	**272.12412**	136.56570	A	741.43664	**371.22196**	6
4	385.20819	193.10773	L	**670.39952**	**335.70340**	5
5	514.25079	257.62903	E	**557.31545**	279.16136	4
6	**670.35191**	**335.67959**	R	**428.27285**	214.64006	3
7	767.40468	384.20598	P	**272.17173**	136.58950	2
8			R	175.11896	88.06312	1



#1	b^{+}	b^{2+}	Seq.	y^{+}	y^{2+}	#2
1	130.04988	65.52858	E			8
2	201.08700	101.04714	A	840.50506	**420.75617**	7
3	**272.12412**	136.56570	A	769.46794	385.23761	6
4	385.20819	193.10773	L	**698.43082**	349.71905	5
5	514.25079	257.62903	E	585.34675	293.17701	4
6	**698.38321**	349.69524	R-Dimethyl	**456.30415**	**228.65571**	3
7	795.43598	398.22163	P	**272.17173**	136.58950	2
8			R	175.11896	88.06312	1

E

PRMT6 in vivo (Coverage 63%)

```
                              *      * **
MSQPKKRKLE SGGGGEGGEG TEEEDGAERE AALERPRRTK RERDQLYYEC YSDVSVHEEM IADRVRTDAY RLGILRNWAA
 *
LRGKTVLDVG AGTGILSIFC AQAGARRVYA VEASAIWQQA REVVRFNGLE DRVHVLPGPV ETVELPEQVD AIVSEWMGYG
LLHESMLSSV LHARTKWLKE GGLLLPASAE LFIAPISDQM LEWRLGFWSQ VKQHYGVDMS CLEGFATRCL MGHSEIVVQG
LSGEDVLARP QRFAQLELSR AGLEQELEAG VGGRFRCSCY GSAPMHGFAI WFQVTFPGGE SEKPLVLSTS PFHPATHWKQ
ALLYLNEPVQ VEQDTDVSGE ITLLPSRDNP RRLRVLLRYK VGDQEEKTKD FAMED
```