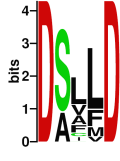
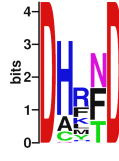
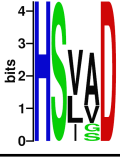
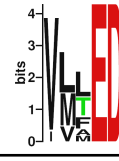
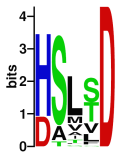
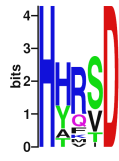
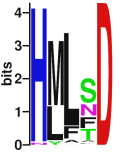
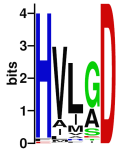


Cluster name	Representative members	References	Putative substrates	AA-rich (region)	Conserved residues in TMD II	Conserved residues in TMD V
MTP8-like	ShMTP1-4 AtMTP11 PtrMTP9 PtrMTP11.1 PtrMTP11.2 PiMnT1	[11] [48] ¹ [48] [48] ²	Mn ³ Mn ^{3,4} Mn ³ Mn ³ Mn ³ Mn ³	S-rich (N-ter)		
ZnT9-like	HsZnT9	[61]	Unknown			
FieF-like	EcFieF	[7]	Fe, Zn, Cd ⁵			
WmFieF-like	WmFieF	[12]	Fe, Zn, Cd, Ni, Co ^{3,4}			
MMT-like	ScMMT1 ScMMT2	[47] [47]	Fe ⁴ Fe ⁴	H/S-rich (N-ter and loop III-IV)		
ZnT2-like	AtMTP1 AtMTP3 TgMTP1 PtdMTP1 RnZnT2 MmZnT3, HsZnT3 MmZnT4 HsZnT8	[26] [36] [13] [23] [37] [38] [39] [62]	Zn, Cd ⁵ Zn Zn, Ni, Cd, Co ³ Zn ³ Zn ³ Zn ⁶ Zn ^{3,4} Zn ⁶	H/S-rich (loop IV-V)		
ZitB-like	EcZitB BsCzcD	[6, 63] [8]	Zn, Cd ⁵ Zn, Cd, Co ^{3,5}	H-rich (N- and C-ter)		
ZnT1-like	RnZnT1, MmZnT1	[40]	Zn ³	H/S-rich (loop IV-V); S/C-rich (loop V-VI and C-ter)		
Zrc1-like	ScZrc1 ScCot1 SpZhf1	[43] [44] [45]	Zn, Co ⁴ Co, Zn, Cd ⁴ Zn, Co, Cd ⁴	H/S-rich (loop IV-V and C-ter)		
DmeF-like	DmeF	[12]	Co, Zn ^{3,4}	S-rich (N-ter); H-rich (loop IV-V and C-ter)		
Msc2-like	ScMsc2 MmZnT5, HsZnT5 HsZnT7 HsZTL1	[19] [20, 64] [42] [21]	Zn ⁴ Zn ^{3,4} Zn ³ Zn ^{4,7}	H/S-rich (N-ter and loop IV-V) ⁸		
ZnT6-like	HsZnT6	[41]	Zn ³	S-rich (loop IV-V); H/S-rich (C-ter)		
Zrg17-like	ScZrg17	[22]	Zn ⁴	S-rich (N-ter); H/S-rich (loop III-IV)	