

S-Table III: Location signals in the compared CA/C1 peptidases¹.

Protein Identifier	Predicted Localization	PROSITE signatures	PFAM signatures
L-family			
L-subfamily			
hCTSL	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08246
mctsl	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08246
hCTSL2	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08246
CTSL4_human	Lysosomal	PS00639,PS00139,	PF00112.13,PF08246
CTSL3_human	Lysosomal	No specific motif found.	PF00112.13, PF08246
mctsl-like	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08246
falcpain1_PF	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13
falcpain2_PF	Lysosomal	PS00639,PS00139,	PF00112.13 PF08246
falcpain2'_PF	Lysosomal	PS00639,PS00139,	PF00112.13,PF08246.2
falcpain3_PF	Lysosomal	PS00139,	PF00112.13, PF08246
falcpain1_PB	Lysosomal	PS00640,PS00639,	PF00112.13,PF08246
falcpain2_PB	Lysosomal	PS00639,	PF00112.13, PF08246
PFB0335c /Sera6	Secretory pathway	PS00139,	PF00112.13
PFB0330c /Sera7	Secretory pathway	PS00139,	PF00112.13,
PB000233	Secretory pathway	No specific motif found.	PF00112.13,
PB000352	Secretory pathway	PS00139,	PF00112.13,
hCTSS	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08246
mctss	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08246
hCTSK	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08246
mctsk	Lysosomal	PS00639,PS00139,	PF00112.13,PF08246
hCTSH	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08246
mctsh	Lysosomal	PS00640,PS00639,	PF00112.13,PF08246
J-subfamily			
mctsj	Lysosomal	PS00640,PS00639,PS00139,	,PF00112.13,PF08246
mctsm	Lysosomal	PS00639,	PF00112.13, PF08246
mctsq	Lysosomal	PS00640,PS00639,	PF00112.13,PF08246
mctsr	Lysosomal	PS00640,PS00639,	PF00112.13,PF08246
mcts_7	Lysosomal	PS00639,PS00139,	PF00112.13,PF08246
mcts_2	Lysosomal	PS00639,	PF00112.13, PF08246
mcts_3	Lysosomal	PS00639,	PF00112.13, PF08246
mcts_6	Lysosomal	PS00640,PS00639,	PF00112.13,PF08246

F-subfamily			
hCTSF	Lysosomal	PS00639,PS00139,	PF00112.13,PF08246
mctsf	Lysosomal	PS00639,PS00139,	PF00112.13,PF08246
hCTSO	Lysosomal	PS00639,PS00139,	PF00112.13
mctso	Lysosomal	PS00639,PS00139,	PF00112.13
hCTSW	Lysosomal	PS00640,PS00639,	PF00112.13,PF08246
mctsw	Lysosomal	PS00640,PS00639,	PF00112.13,PF08246
B-family			
hCTSB	Lysosomal	PS00640,PS00639,PS00139,	PF08127.3,PF00112.13
mctsb	Lysosomal	PS00640,PS00139,PS00435,	PF08127.3,PF00112.13
hCTSC	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08773.1
mctsc	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13,PF08773.1
hCTSZ	Lysosomal	PS00640,	PF00112.13
mctsz	Lysosomal	PS00640,	PF00112.13
CTSC_PF	Lysosomal	PS00640,PS00639,PS00139,	PF00112.13
CTSC'_PF	Lysosomal	PS00640,PS00639,	PS00139,PF00112.13
PB000856_PB	Lysosomal	PS00640,PS00639,	PF00112.13
PFD0230c_PF	Lysosomal	PS00639,PS00139,	PF00112.13

¹Using the Loctree algorithm and support vector machines, CA/C1 peptidases (left), their identified localization signals (middle) and corresponding prosite signatures (right) as well as Pfam signatures (far right) are given.