

## Figure 3S. Sequence coverage recombinant SUMO paralogs.

### SUMO 1

#### Trypsin (MS/MS)

MSDQEAKPST EDLGDKKEGE YIKLKVIGQD SSEIHFVKVM TTHLKKLKES YCQRQGVPMN SLRFLFEGQR IADNHTPKEL GMEEEDVIEV YQEQTGG

#### Chymotrypsin (MS/MS)

MSDQEAKPST EDLGDKKEGE YIKLKVIGQD SSEIHFVKVM TTHLKKLKES YCQRQGVPMN SLRFLFEGQR IADNHTPKEL GMEEEDVIEV YQEQTGG

#### Trypsin (MALDI)

MSDQEAKPST EDLGDKKEGE YIKLKVIGQD SSEIHFVKVM TTHLKKLKES YCQRQGVPMN SLRFLFEGQR IADNHTPKEL GMEEEDVIEV YQEQTGG

#### Chymotrypsin (MALDI)

MSDQEAKPST EDLGDKKEGE YIKLKVIGQD SSEIHFVKVM TTHLKKLKES YCQRQGVPMN SLRFLFEGQR IADNHTPKEL GMEEEDVIEV YQEQTGG

#### Overall (MS/MS Sequence Coverage 84/97 = 86.6%)

MSDQEAKPST EDLGDKKEGE YIKLKVIGQD SSEIHFVKVM TTHLKKLKES YCQRQGVPMN SLRFLFEGQR IADNHTPKEL GMEEEDVIEV YQEQTGG

### SUMO 2

#### Trypsin (MS/MS)

MADEKPKEGV K TENNDHINL KVAGQDGSVV QFKIKRHTPL SKLMKAYCER QGLSMRQIRF RFDGQPINET DTPAQLEMED EDTIDVFQQQ TGG

#### Chymotrypsin (MS/MS)

MADEKPKEGV K TENNDHINL KVAGQDGSVV QFKIKRHTPL SKLMKAYCER QGLSMRQIRF RFDGQPINET DTPAQLEMED EDTIDVFQQQ TGG

#### Trypsin (MALDI)

MADEKPKEGV K TENNDHINL KVAGQDGSVV QFKIKRHTPL SKLMKAYCER QGLSMRQIRF RFDGQPINET DTPAQLEMED EDTIDVFQQQ TGG

#### Chymotrypsin (MALDI)

MADEKPKEGV K TENNDHINL KVAGQDGSVV QFKIKRHTPL SKLMKAYCER QGLSMRQIRF RFDGQPINET DTPAQLEMED EDTIDVFQQQ TGG

#### Overall (MS/MS Sequence Coverage 73/95 = 76.8%)

MADEKPKEGV K TENNDHINL KVAGQDGSVV QFKIKRHTPL SKLMKAYCER QGLSMRQIRF RFDGQPINET DTPAQLEMED EDTIDVFQQQ TGG

### SUMO 3

#### Trypsin (MS/MS)

MSEKPKEGV K TENDHINLK VAGQDGSVVQ FKIKRHTPLS KLMKAYCERQ GLSMRQIRFR FDGQPINETD TPAQLEMEDE DTIDVFQQQT GG

#### Chymotrypsin (MS/MS)

MSEKPKEGV K TENDHINLK VAGQDGSVVQ FKIKRHTPLS KLMKAYCERQ GLSMRQIRFR FDGQPINETD TPAQLEMEDE DTIDVFQQQT GG

#### Trypsin (MALDI)

MSEKPKEGV K TENDHINLK VAGQDGSVVQ FKIKRHTPLS KLMKAYCERQ GLSMRQIRFR FDGQPINETD TPAQLEMEDE DTIDVFQQQT GG

#### Chymotrypsin (MALDI)

MSEKPKEGV K TENDHINLK VAGQDGSVVQ FKIKRHTPLS KLMKAYCERQ GLSMRQIRFR FDGQPINETD TPAQLEMEDE DTIDVFQQQT GG

#### Overall (MS/MS Sequence Coverage 48/93 = 52%)

MSEKPKEGV K TENDHINLK VAGQDGSVVQ FKIKRHTPLS KLMKAYCERQ GLSMRQIRFR FDGQPINETD TPAQLEMEDE DTIDVFQQQT GG