

Division of Signal Transduction Therapy

Standard Operation Procedure

Preparation of Ubiquitin

<u>Enzyme description:-</u>	Ubiquitin 1-76 = mature, full length
<u>Clone number:-</u>	DU20027
<u>Source:-</u>	human recombinant
<u>Tag:-</u>	no tag
<u>Purification method:-</u>	Precipitation of contaminants, Source 15 S
<u>Expression system:-</u>	E. coli
<u>Calculated molecular mass:-</u>	
Monoisotopic	8559 Da
Average Mass	8564 Da
[cysteines reduced, methionines have not been oxidised]	
<u>Theoretical pI:-</u>	7.7
<u>Purity:-</u>	95%
<u>Enzyme storage buffer:-</u>	
H ₂ O	
<u>Storage temperature:-</u>	-80°C
<u>Assay:-</u>	
Ubiquitin chain formation with UBE1, UBE2N & UBE2V1	

Division of Signal Transduction Therapy

Clone Data Sheet

Ubiquitin 1-76

<u>Protein</u>	Ubiquitin 1-76
<u>Synonyms</u>	Ubiquitin-60S ribosomal protein L40, CEP52, Ubiquitin, A-52 residue ribosomal fusion protein product 1, Ubiquitin-40S ribosomal S27a precursor (RPS27A). <i>These are gene products, which are matured into Ubiquitin 1-76.</i>
<u>Clone Number</u>	DU20027
<u>Species</u>	Human
<u>Accession Number</u>	Protein: P62987
<u>Tags</u>	no tag
Aminoacid sequence of the expressed protein	MQIFVKTLTGKTITLEVEPSDTIENVKAKIQDKEGIPPDQORLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLLGG
Native sequence	In mammalian cells Ubiquitin is expressed as a precursor by several genes and cleaved by a DUB to become the mature 76 residue protein Ubiquitin.
Protease cleavage	N/A
Cloning sites	NdeI / BamHI
<u>DNA sequence of insert</u>	CATATGCAGATCTTCGTGAAGACCCTGACTGGTAAGACCATCACTCTCGAAGTGGAGCCGAGTGACACCATTGAGAATGTCAAGGCAAAGATCCAAGACAAGGAAGGCATCCCTCCTGACCAGCAGAGGTTGATCTTTGCTGGGAAACAGCTGGAAGATGGACGCACCCTGTCTGACTACAACATCCAGAAAGAGTCCACCCTGCACCTGGTCTCCGTCTCCGAGGTGGGTGATAAGGATCC