

*Division of Signal Transduction Therapy*

**Standard Operation Procedure**

**Preparation of UBE2D2**

<b><u>Enzyme description:-</u></b>	UBE2D2 2-147 (end)
<b><u>Clone number:-</u></b>	DU20184
<b><u>Source:-</u></b>	human recombinant
<b><u>Tag:-</u></b>	cleaved from N-terminal His <sub>6</sub> -tag
<b><u>Purification method:-</u></b>	Ni <sup>++</sup> -NTA-Sepharose, Thrombin, SEC
<b><u>Expression system:-</u></b>	E.coli
<b><u>Calculated molecular mass:-</u></b>	
Monoisotopic	18254 Da
Average Mass	18265 Da
[cysteines reduced, methionines have not been oxidised]	
<b><u>Theoretical pI:-</u></b>	8.89
<b><u>Purity:-</u></b>	90%
<b><u>Enzyme storage buffer:-</u></b>	
50mM HEPES pH 7.5, 150mM NaCl, 10% glycerol, 1mM DTT	
<b><u>Storage temperature:-</u></b>	-80°C
<b><u>Assay:-</u></b>	
Loading with Ubiquitin and UBE1 in the presence of Mg-ATP	

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**Clone Data Sheet**

**UBE2D2**

<b><u>Protein</u></b>	UBE2D2 2-147 (end)
<b><u>Synonyms</u></b>	UbcH5b, E2D2
<b><u>Clone Number</u></b>	DU20184
<b><u>Species</u></b>	Human
<b><u>Accession Number</u></b>	Protein: P62837      DNA: NM_003339
<b><u>Tags</u></b>	N-terminal His <sub>6</sub> tag
Aminoacid sequence of the expressed protein	<b><u>G</u>SHMASMTGGQQMGRGS<b><u>S</u></b>ALKRI<b><u>H</u></b>KELNDLARDPP<b><u>A</u></b>QCSAGPVGDDMFHWQAT<b><u>I</u></b>MGPNDSPY<b><u>Q</u></b>GGV<b><u>F</u></b>FLTI<b><u>H</u></b>FPTDYPFKPPKV<b><u>A</u></b>FT<b><u>T</u></b>RIYHPNINSNGS<b><u>I</u></b>CLDI<b><u>L</u></b>RSQWSPAL<b><u>T</u></b>ISKVLLS<b><u>I</u></b>CSLLCDPNPDDPLVPEIARIYKTDREKYNRIARE<b><u>W</u></b>T<b><u>Q</u></b>KY<b><u>A</u></b>M</b>
Native sequence	Full length, but start Methionine is missing
Protease cleavage	Thrombin site underlined
Cloning sites	BamH1 / NotI
<b><u>DNA sequence of insert</u></b>	<b><u>GGATCCGCTCTGAAGAGAATCCACAAGGAATTGAATGATCTGGCACGGGA</u></b> <b><u>CCCTCCAGCACAGTGTTTCAGCAGGTCCTGTTGGAGATGATATGTTCCATT</u></b> <b><u>GGCAAGCTACAATAATGGGGCCAAATGACAGTCCCTATCAGGGTGGAGTA</u></b> <b><u>TTTTTCTTGACAATTCATTTCCCAACAGATTACCCCTTCAAACCACCTAA</u></b> <b><u>GGTTGCATTTACAACAAGAATTTATCATCCAAATATTAACAGTAATGGCA</u></b> <b><u>GCATTTGTCTTGATATTCTACGATCACAGTGGTCTCCAGCACTAACTATT</u></b> <b><u>TCAAAAGTACTCTTGTCATCTGTTCTCTGTTGTGTGATCCCAATCCAGA</u></b> <b><u>TGATCCTTTAGTGCTGAGATTGCTCGGATCTACAAAACAGATAGAGAAA</u></b> <b><u>AGTACAACAGAATAGCTCGGGAATGGACTCAGAAGTATGCGATGTAAGCG</u></b> <b><u>GCCGC</u></b>