

*Division of Signal Transduction Therapy*

**Standard Operation Procedure**

**Preparation of Ubiquitin [K29R]**

|                                                         |                                            |
|---------------------------------------------------------|--------------------------------------------|
| <b><u>Enzyme description:-</u></b>                      | Ubiquitin 1-76 [K29R]                      |
| <b><u>Clone number:-</u></b>                            | DU23833                                    |
| <b><u>Source:-</u></b>                                  | human recombinant                          |
| <b><u>Tag:-</u></b>                                     | no tag                                     |
| <b><u>Purification method:-</u></b>                     | Precipitation of contaminants, Source 15 S |
| <b><u>Expression system:-</u></b>                       | E.coli                                     |
| <b><u>Calculated molecular mass:-</u></b>               |                                            |
| Monoisotopic                                            | 8587 Da                                    |
| Average Mass                                            | 8592 Da                                    |
| [cysteines reduced, methionines have not been oxidised] |                                            |
| <b><u>Theoretical pI:-</u></b>                          | 7.7                                        |
| <b><u>Purity:-</u></b>                                  | 95%                                        |
| <b><u>Enzyme storage buffer:-</u></b>                   | H <sub>2</sub> O                           |
| <b><u>Storage temperature:-</u></b>                     | -80°C                                      |
| <b><u>Assay:-</u></b>                                   |                                            |

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**Clone Data Sheet**

**Ubiquitin 1-76 [K29R]**

|                                             |                                                                                                                                                                                                                                                                                |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b><u>Protein</u></b>                       | Ubiquitin 1-76 [K29R]                                                                                                                                                                                                                                                          |
| <b><u>Synonyms</u></b>                      |                                                                                                                                                                                                                                                                                |
| <b><u>Clone Number</u></b>                  | DU23833                                                                                                                                                                                                                                                                        |
| <b><u>Species</u></b>                       | Human                                                                                                                                                                                                                                                                          |
| <b><u>Accession Number</u></b>              | Protein: P62987                                                                                                                                                                                                                                                                |
| <b><u>Tags</u></b>                          | no tag                                                                                                                                                                                                                                                                         |
| Aminoacid sequence of the expressed protein | <b>MQIFVKTLTGKTITLEVEPSDTIENVKARIQDKEGIPPDOORLIFAGKQL<br/>EDGRTLSDYNIQKESTLHLVLRGG</b>                                                                                                                                                                                         |
| 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                               | Nde1 / BamHI                                                                                                                                                                                                                                                                   |
| <b><u>DNA sequence of insert</u></b>        | <b>CATATGCAGATCTTCGTGAAGACCCTGACTGGTAAGACCATCACTCTCGA<br/>AGTGGAGCCGAGTGACACCATTGAGAATGTCAAGGCAAGGATCCAAGACA<br/>AGGAAGGCATCCCTCCTGACCAGCAGAGGTTGATCTTTGCTGGGAAACAG<br/>CTGGAAGATGGACGCACCCTGTCTGACTACAACATCCAGAAAGAGTCCAC<br/>CCTGCACCTGGTCCTCCGTCTCCGAGGTGGGTGATAAGGATCC</b> |