

## Active Recombinant Human OTUB1, GST-tagged

**Cat. No.** OTUB1-164H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant human OTUB1 (amino acid residues 1-271), fused with N-terminal GST, was expressed in E.coli.                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>ProteinLength</b>    | 1-271 a.a.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Description</b>      | OTUB1 was recently shown to modulate p53 stability through inhibition of UBE2D1. p53 is known to be ubiquitylated and destabilized by MDM2 and several other ubiquitin E3s and both deubiquitylated and stabilized by USP7 and USP10. Recent studies have shown that OTUB1 can directly suppress MDM2-mediated p53 ubiquitylation in cells and in vitro. Overexpression of OTUB1 drastically stabilizes and activates p53, leading to apoptosis and marked inhibition of cell proliferation in a p53-dependent manner (Sun et al., 2012). |
| <b>Form</b>             | 50 mM HEPES pH 7.5, 150 mM sodium chloride, 2 mM dithiothreitol, 10% glycerol                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Bio-activity</b>     | The activity of GST-OTUB1 was validated by the monitoring of mono-ubiquitin generation as a result of the enzyme catalysed cleavage of K48-linked di-ubiquitin. Incubation of the substrate in the presence or absence of GST-OTUB1 was compared confirming the deubiquitylating activity of GST-OTUB1.                                                                                                                                                                                                                                   |
| <b>Molecular Mass</b>   | 58.1 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                            |                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Purity</b>              | >98% by SDS-PAGE                                                                                                                                                                                                                                                                                                                                                  |
| <b>Storage</b>             | 12 months at -70°C. Avoid multiple freeze/thaw cycles.                                                                                                                                                                                                                                                                                                            |
| <b>Concentration</b>       | 0.5 mg/ml                                                                                                                                                                                                                                                                                                                                                         |
| <b>GENE INFORMATION</b>    |                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Gene Name</b>           | OTUB1 OTU domain, ubiquitin aldehyde binding 1 [ Homo sapiens ]                                                                                                                                                                                                                                                                                                   |
| <b>Official Symbol</b>     | OTUB1                                                                                                                                                                                                                                                                                                                                                             |
| <b>Synonyms</b>            | OTUB1; OTU domain, ubiquitin aldehyde binding 1; ubiquitin thioesterase OTUB1; FLJ20113; FLJ40710; otubain-1; OTU-domain Ubal-binding 1; deubiquitinating enzyme OTUB1; ubiquitin-specific protease otubain 1; ubiquitin-specific-processing protease OTUB1; OTU domain-containing ubiquitin aldehyde-binding protein 1; OTB1; OTU1; HSPC263; MGC4584; MGC111158; |
| <b>Gene ID</b>             | 55611                                                                                                                                                                                                                                                                                                                                                             |
| <b>mRNA Refseq</b>         | NM_017670                                                                                                                                                                                                                                                                                                                                                         |
| <b>Protein Refseq</b>      | NP_060140                                                                                                                                                                                                                                                                                                                                                         |
| <b>MIM</b>                 | 608337                                                                                                                                                                                                                                                                                                                                                            |
| <b>UniProt ID</b>          | Q96FW1                                                                                                                                                                                                                                                                                                                                                            |
| <b>Chromosome Location</b> | 11q13.1                                                                                                                                                                                                                                                                                                                                                           |
| <b>Function</b>            | NEDD8-specific protease activity; cysteine-type peptidase activity; omega peptidase                                                                                                                                                                                                                                                                               |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

activity; peptidase activity; protein binding; ubiquitin binding; ubiquitin-specific protease activity;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA