



TEL:4006-871-227 Web:www.ybio.net Email:shybio@126.com

YB80838Hu01

Otubain 1 (OTUB1)

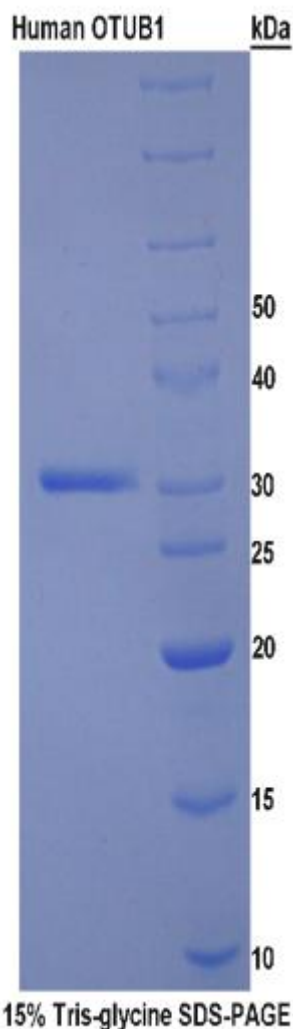
Organism: Homo sapiens (Human)

Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES

1th Edition (Revised in February, 2012)

[DESCRIPTION]



Protein Names: Otubain 1

Gene Names: OTUB1

Size: 100μg

Source: Recombinant

Expression Host: *E.coli*

Function: Hydrolase that can remove conjugated ubiquitin from proteins and plays an important regulatory role at the level of protein turnover by preventing degradation. Regulator of T-cell anergy, a phenomenon that occurs when T-cells are rendered unresponsive to antigen rechallenge and no longer respond to their cognate antigen. Acts via its interaction with RNF128/GRAIL, a crucial inductor of CD4 T-cell anergy.

Subcellular Location: Cytoplasm

Tissue Specificity: Isoform 1 is ubiquitous. Isoform 2 is expressed only in lymphoid tissues such as tonsils, lymph nodes, spleen and peripheral blood mononuclear cells.

[PROPERTIES]

Residues: Met1~Lys271 (Accession # Q96FW1), with a N-terminal His-tag.

Grade & Purity: >97%, 32.53 kDa as determined by SDS-PAGE reducing conditions.

Form & Buffer: Supplied as lyophilized form in PBS, pH 7.4.

Endotoxin Level: <1.0 EU per 1μg(determined by the LAL method).

Applications: SDS-PAGE; WB; ELISA;IP.

(May be suitable for use in other assays to be determined by the end user.)

Predicted Molecular Mass: 32.53 kDa

[PREPARATION]

Reconstitute in PBS.

[STORAGE AND STABILITY]



TEL:4006-871-227 Web:www.ybio.net Email:shybio@126.com

Storage: Store at 4°C for short term storage (1-2 weeks). Aliquot and store at -20°C or -80°C for long term storage. Avoid repeated freeze/thaw cycles.

Valid period: 12 months stored at -80°C.

[BACKGROUND]

The target protein is fused with a His-tag and its sequence is listed below. The first Met is an initiator amino acid. Moreover, Gly and Ser are added to improve the flexibility of N-terminus at both ends of the His-tag, which will increase the chelating ability of the tag to Ni-Sepharose during purification.

MGHHHHHSGS-MAAEEPQQQK QEPLGSDSEG VNCLAYDEAI MAQQDRIQQE IAVQNPLVSE RLELSVLYKE
YAEDDNIYQQ KIKDLHKKYS YIRKTRPDGN CFYRAFGFSH LEALLDDSKE LQRFKAVSAK SKEDLVSQGF
TEFTIEDFHN TFMDLIEQVE KQTSVADLLA SFNDQSTSDY LVVYLRLITS GYLQRESKFF EHFIEGGRTV
KEFCQQEVEP MCKESDHIHI IALAQALSVS IQVEYMDRGE GGTTNPHIFP EGSEPKVYLL YRPGHYDILY K

[REFERENCES]

1. Borodovsky A., et al. (2002) Chem. Biol. 9:1149-1159.
2. Balakirev M.Y., et al. (2003) EMBO Rep. 4:517-522.
3. Stanisic V., et al. (2009) Borodovsky A., et al. J. Biol. Chem. 284:16135-16145.
4. Soares L., et al. (2004) Nat. Immunol. 5:45-54.
5. Edelman M.J., et al. (2009) Biochem. J. 418:379-390.
6. Wang T., et al. (2009) J. Mol. Biol. 386:1011-1023.