

Product datasheet

Recombinant human UBE2D3 protein (Active) ab269098

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Description

Product name	Recombinant human UBE2D3 protein (Active)
Biological activity	The specific activity of ab269098 was determined to be 17 nmol/min/mg in a ubiquitinating assay using wild-type ubiquitin protein as substrate.
Purity	> 95 % SDS-PAGE.
Expression system	Escherichia coli
Accession	<u>P61077</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MALKRINKELSDLARDPPAQCSAGPVGDDMFHWQATIMG PNDSPYQGGVF FLTIHFPTDYPFKPPKVAFTTRIMHPNINSNGSICLDILRSQW SPALTIS KVLLSICSLLCDPNPDDPLVPEIARIYKTRDKYNRISREWT QKYAM
Molecular weight information	17 kDa by SDS-PAGE
Amino acids	1 to 147
Tags	His tag N-Terminus
Additional sequence information	NM_003340

Specifications

Our **Abpromise guarantee** covers the use of **ab269098** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Liquid

Preparation and Storage

Stability and Storage

Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle.

pH: 7.00

Preservative: 1.02% Imidazole

Constituents: 0.82% Sodium phosphate, 1.74% Sodium chloride, 0.002% PMSF, 0.004% DTT, 25% Glycerol (glycerin, glycerine)

This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function

Accepts ubiquitin from the E1 complex and catalyzes its covalent attachment to other proteins. In vitro catalyzes 'Lys-11'-, as well as 'Lys-48'-linked polyubiquitination. Cooperates with the E2 CDC34 and the SCF(FBXW11) E3 ligase complex for the polyubiquitination of NFKBIA leading to its subsequent proteasomal degradation. Acts as an initiator E2, priming the phosphorylated NFKBIA target at positions 'Lys-21' and/or 'Lys-22' with a monoubiquitin. Ubiquitin chain elongation is then performed by CDC34, building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin. Acts also as an initiator E2, in conjunction with RNF8, for the priming of PCNA. Monoubiquitination of PCNA, and its subsequent polyubiquitination, are essential events in the operation of the DNA damage tolerance (DDT) pathway that is activated after DNA damage caused by UV or chemical agents during S-phase. Associates with the BRCA1/BARD1 E3 ligase complex to perform ubiquitination at DNA damage sites following ionizing radiation leading to DNA repair. Targets DAPK3 for ubiquitination which influences promyelocytic leukemia protein nuclear body (PML-NB) formation in the nucleus. In conjunction with the MDM2 and TOPORS E3 ligases, functions ubiquitination of p53/TP53. Supports NRDP1-mediated ubiquitination and degradation of ERBB3 and of BRUCE which triggers apoptosis. In conjunction with the CBL E3 ligase, targets EGFR for polyubiquitination at the plasma membrane as well as during its internalization and transport on endosomes. In conjunction with the STUB1 E3 quality control E3 ligase, ubiquitinates unfolded proteins to catalyze their immediate destruction.

Pathway

Protein modification; protein ubiquitination.

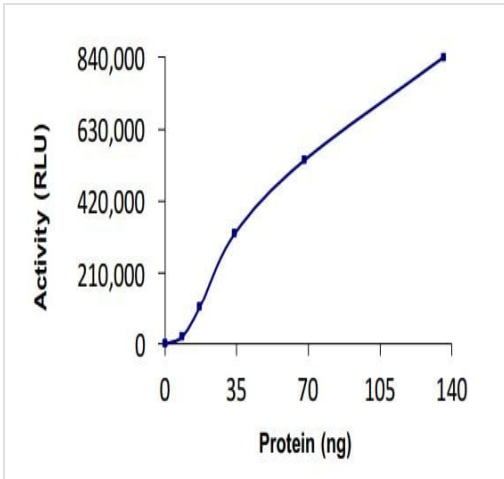
Sequence similarities

Belongs to the ubiquitin-conjugating enzyme family.

Cellular localization

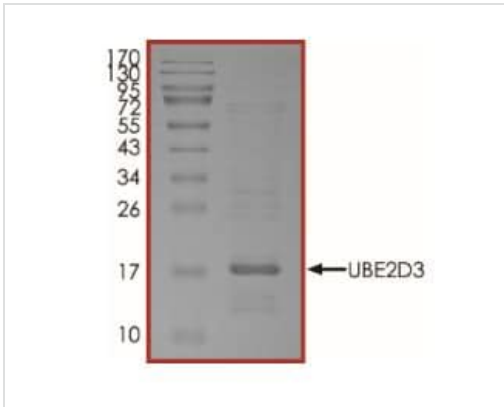
Cell membrane. Endosome membrane.

Images



The specific activity of ab269098 was determined to be 17 nmol/min/mg in a ubiquitinating assay using wild-type ubiquitin protein as substrate.

Functional Studies - Recombinant human UBE2D3 protein (ab269098)



SDS-PAGE analysis of ab269098.

SDS-PAGE - Recombinant human UBE2D3 protein (ab269098)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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