Datasheet for ABIN7564287

RNF168 Protein (AA 1-565) (His tag)

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Overview

Quantity:	1 mg
Target:	RNF168
Protein Characteristics:	AA 1-565
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This RNF168 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Rnf168 Protein expressed in mammalian cells.
Sequence:	MAAPKTSIPS LAECQCGICM EILLEPVTLP CNHTLCNPCF QSTVEKANLC CPFCRRRVSS WTRYHTRRNS LVNTDLWEII QKHYAKECKL RISGQESKEI IDECQPVRRL SEPGELRREY EEEISRVEAE RQASKEEENK ASEEYIQRLL AEEEEEEKRQ REKRRSEMEE QLRGDEELAR SLSTSINSNY ERNTLASPLS SRKSDPVTNK SQKKNTSKQK TFGDIQKYLS PKLKPGTALA CKAELEEDIC KSKETDRSDT KSPVLQDTEI EKNIPTLSPQ TCLETQEQGS ESSAGIPGPQ LCVGDTKESL EGKVETVSTS PDDLCIVNDD GPRATVFYSN EAAVNSSSKI ENEEYSVTGV PQLTGGNRVP TESRVYHLLV EEEISDRENQ ESVFEEVMDP CFSAKRRKIF IESSSDQEET EVNFTQKLID LEHMLFERHK QEEQDRLLAL QLQKEVDKEQ MVPNRQKGSP DQYQLRTPSP PDRLLNRQRK NSKDRNSLQQ TNADHSKSPR NTKGDYWEPF KNTWKDSVNG TKMPTSTQDN CNVSKSAYTV QHRKSQRSIV QMFQR **Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

Product Details

Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalian cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • State-of-the-art algorithm used for plasmid design (Gene synthesis). This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein. If you are not interested in a full length protein, please contact us for individual protein fragments. The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

Target Details

Target:	RNF168
Alternative Name:	Rnf168 (RNF168 Products)
Background:	E3 ubiquitin-protein ligase RNF168 (EC 2.3.2.27) (RING finger protein 168) (RING-type E3 ubiquitin transferase RNF168),FUNCTION: E3 ubiquitin-protein ligase required for accumulation of repair proteins to sites of DNA damage. Acts with UBE2N/UBC13 to amplify the RNF8-dependent histone ubiquitination. Recruited to sites of DNA damage at double-strand breaks (DSBs) by binding to ubiquitinated histone H2A and H2AX and amplifies the RNF8-dependent H2A ubiquitination, promoting the formation of 'Lys-63'-linked ubiquitin conjugates. This leads to concentrate ubiquitinated histones H2A and H2AX at DNA lesions to the threshold required for recruitment of TP53BP1 and BRCA1. Also recruited at DNA interstrand cross-links (ICLs) sites and promotes accumulation of 'Lys-63'-linked ubiquitination of histones H2A and H2AX, leading to recruitment of FAAP20 and Fanconi anemia (FA) complex, followed by interstrand cross-link repair. H2A ubiquitination also mediates the ATM-dependent transcriptional silencing

Target Details

	at regions flanking DSBs in cis, a mechanism to avoid collision between transcription and repair intermediates. Also involved in class switch recombination in immune system, via its role in regulation of DSBs repair. Following DNA damage, promotes the ubiquitination and degradation of JMJD2A/KDM4A in collaboration with RNF8, leading to unmask H4K20me2 mark and promote the recruitment of TP53BP1 at DNA damage sites. Not able to initiate 'Lys-63'-linked ubiquitination in vitro, possibly due to partial occlusion of the UBE2N/UBC13-binding region. Catalyzes monoubiquitination of 'Lys-13' and 'Lys-15' of nucleosomal histone H2A (H2AK13Ub and H2AK15Ub, respectively). {ECO:0000255|HAMAP-Rule:MF_03066, ECO:0000269|PubMed:20080757}.
Molecular Weight:	64.8 kDa
UniProt:	Q80XJ2
Pathways:	Production of Molecular Mediator of Immune Response

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months