Datasheet for ABIN7547675

FBXO5 Protein (AA 1-447) (His tag)

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Overview

Quantity:	1 mg
Target:	FBXO5
Protein Characteristics:	AA 1-447
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FBXO5 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant FBXO5 Protein expressed in mammalian cells.
Sequence:	MSRRPCSCAL RPPRCSCSAS PSAVTAAGRP RPSDSCKEES STLSVKMKCD FNCNHVHSGL KLVKPDDIGR LVSYTPAYLE GSCKDCIKDY ERLSCIGSPI VSPRIVQLET ESKRLHNKEN QHVQQTLNST NEIEALETSR LYEDSGYSSF SLQSGLSEHE EGSLLEENFG DSLQSCLLQI QSPDQYPNKN LLPVLHFEKV VCSTLKKNAK RNPKVDREML KEIIARGNFR LQNIIGRKMG LECVDILSEL FRRGLRHVLA TILAQLSDMD LINVSKVSTT WKKILEDDKG AFQLYSKAIQ RVTENNNKFS PHASTREYVM FRTPLASVQK SAAQTSLKKD AQTKLSNQGD QKGSTYSRHN EFSEVAKTLK KNESLKACIR CNSPAKYDCY LQRATCKREG CGFDYCTKCL CNYHTTKDCS DGKLLKASCK IGPLPGTKKS KKNLRRL **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.**
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.

Product Details

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:	FBXO5
Alternative Name:	FBXO5 (FBXO5 Products)
Background:	F-box only protein 5 (Early mitotic inhibitor 1),FUNCTION: Regulator of APC activity during mitotic and meiotic cell cycle (PubMed:17485488, PubMed:17234884, PubMed:17875940, PubMed:23708001, PubMed:23708605, PubMed:16921029). During mitotic cell cycle plays a role as both substrate and inhibitor of APC-FZR1 complex (PubMed:29875408, PubMed:17485488, PubMed:17234884, PubMed:17875940, PubMed:23708001, PubMed:23708605, PubMed:16921029). During G1 phase, plays a role as substrate of APC-FZR1 complex E3 ligase (PubMed:29875408). Then switches as an inhibitor of APC-FZR1 complex during S and G2 leading to cell-cycle commitment (PubMed:29875408). As APC inhibitor, prevents the degradation of APC substrates at multiple levels: by interacting with APC and blocking access of APC substrates to the D-box coreceptor, formed by FZR1 and ANAPC10, by suppressing ubiquitin ligation and chain elongation by APC by preventing the UBE2C and UBE2S activities (PubMed:23708605, PubMed:23708001, PubMed:16921029). Plays a role in genome integrity preservation by coordinating DNA replication with mitosis

Target Details

	through APC inhibition in interphase to stabilize CCNA2 and GMNN in order to promote mitosis and prevent rereplication and DNA damage-induced cellular senescence (PubMed:17234884, PubMed:17485488, PubMed:17875940). During oocyte maturation, plays a role in meiosis through inactivation of APC-FZR1 complex. Inhibits APC through RPS6KA2 interaction that increases FBXO5 affiniy for CDC20 leading to the metaphase arrest of the second meiotic division before fertilization (By similarity). Controls entry into the first meiotic division through inactivation of APC-FZR1 complex (By similarity). Promotes migration and osteogenic differentiation of mesenchymal stem cells (PubMed:29850565). {ECO:0000250|UniProtKB:Q7TSG3, ECO:0000269|PubMed:16921029, ECO:0000269|PubMed:17234884, ECO:0000269|PubMed:17485488, ECO:0000269|PubMed:17875940, ECO:0000269|PubMed:23708001, ECO:0000269|PubMed:23708605, ECO:0000269|PubMed:29850565, ECO:0000269|PubMed:29875408}.
Molecular Weight:	50.1 kDa
UniProt:	Q9UKT4
Pathways:	Mitotic G1-G1/S Phases

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