Datasheet for ABIN7553733

DYRK2 Protein (AA 1-601) (His tag)

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Overview

Quantity:	1 mg
Target:	DYRK2
Protein Characteristics:	AA 1-601
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This DYRK2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat DYRK2 Protein expressed in mammalien cells.
Sequence:	MLTRKPSAAA PAAYPTGRGG DSAVRQLQAS PGLGAGATRS GVGTGPPSPI ALPPLRASNA AAAAHTIGGS KHTMNDHLHV GSHAHGQIQV QQLFEDNSNK RTVLTTQPNG LTTVGKTGLP VVPERQLDSI HRRQGSSTSL KSMEGMGKVK ATPMTPEQAM KQYMQKLTAF EHHEIFSYPE IYFLGLNAKK RQGMTGGPNN GGYDDDQGSY VQVPHDHVAY RYEVLKVIGK GSFGQVVKAY DHKVHQHVAL KMVRNEKRFH RQAAEEIRIL EHLRKQDKDN TMNVIHMLEN FTFRNHICMT FELLSMNLYE LIKKNKFQGF SLPLVRKFAH SILQCLDALH KNRIIHCDLK PENILLKQQG RSGIKVIDFG SSCYEHQRVY TYIQSRFYRA PEVILGARYG MPIDMWSLGC ILAELLTGYP LLPGEDEGDQ LACMIELLGM PSQKLLDASK RAKNFVSSKG YPRYCTVTTL SDGSVVLNGG RSRRGKLRGP PESREWGNAL KGCDDPLFLD FLKQCLEWDP AVRMTPGQAL RHPWLRRRLP KPPTGEKTSV KRITESTGAI TSISKLPPPS SSASKLRTNL AQMTDANGNI QQRTVLPKLV S **Sequence without tag. The proposed Purification-Tag is based on experiences with the**

Product Details

	expression system, a different complexity of the protein could make another tag necessary. **In case you have a special request, please contact us.**
Characteristics:	Key Benefits: • Made to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien 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, Western Blot
Grade:	custom-made

Target Details

Target:	DYRK2
Alternative Name:	DYRK2 (DYRK2 Products)
Background:	Dual specificity tyrosine-phosphorylation-regulated kinase 2 (EC 2.7.12.1),FUNCTION: Serine/threonine-protein kinase involved in the regulation of the mitotic cell cycle, cell proliferation, apoptosis, organization of the cytoskeleton and neurite outgrowth. Functions in part via its role in ubiquitin-dependent proteasomal protein degradation. Functions downstream of ATM and phosphorylates p53/TP53 at 'Ser-46', and thereby contributes to the induction of apoptosis in response to DNA damage. Phosphorylates NFATC1, and thereby inhibits its accumulation in the nucleus and its transcription factor activity. Phosphorylates EIF2B5 at 'Ser-544', enabling its subsequent phosphorylation and inhibition by GSK3B. Likewise, phosphorylation of NFATC1, CRMP2/DPYSL2 and CRMP4/DPYSL3 promotes their subsequent phosphorylation by GSK3B. May play a general role in the priming of GSK3 substrates. Inactivates GYS1 by phosphorylation at 'Ser-641', and potentially also a second phosphorylation

Target Details

	site, thus regulating glycogen synthesis. Mediates EDVP E3 ligase complex formation and is required for the phosphorylation and subsequent degradation of KATNA1. Phosphorylates TERT at 'Ser-457', promoting TERT ubiquitination by the EDVP complex. Phosphorylates SIAH2, and thereby increases its ubiquitin ligase activity. Promotes the proteasomal degradation of MYC and JUN, and thereby regulates progress through the mitotic cell cycle and cell proliferation. Promotes proteasomal degradation of GLI2 and GLI3, and thereby plays a role in smoothened and sonic hedgehog signaling. Plays a role in cytoskeleton organization and neurite outgrowth via its phosphorylation of DCX and DPYSL2. Phosphorylates CRMP2/DPYSL2, CRMP4/DPYSL3, DCX, EIF2B5, EIF4EBP1, GLI2, GLI3, GYS1, JUN, MDM2, MYC, NFATC1, p53/TP53, TAU/MAPT and KATNA1. Can phosphorylate histone H1, histone H3 and histone H2B (in vitro). Can phosphorylate CARHSP1 (in vitro). {ECO:0000269|PubMed:11311121, ECO:0000269|PubMed:12588975, ECO:0000269|PubMed:14593110, ECO:0000269|PubMed:15910284, ECO:0000269|PubMed:16511445, ECO:0000269|PubMed:16611631, ECO:0000269|PubMed:17349958, ECO:0000269|PubMed:18455992, ECO:0000269|PubMed:18599021, ECO:0000269|PubMed:19287380, ECO:0000269|PubMed:22307329, ECO:0000269|PubMed:22878263, ECO:0000269|PubMed:23362280, ECO:0000269|PubMed:9748265}.
Molecular Weight:	66.7 kDa
UniProt:	Q92630
Pathways:	Regulation of Carbohydrate Metabolic Process

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. 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.

Handling

Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months