

Datasheet for ABIN7556009
VRK2 Protein (AA 1-508) (His tag)



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Overview

Quantity:	1 mg
Target:	VRK2
Protein Characteristics:	AA 1-508
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This VRK2 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat VRK2 Protein expressed in mammalian cells.
Sequence:	MPPKRNEKYK LPIPFPEGKV LDDMEGNQWV LGKKIGSGGF GLIYLAFTN KPEKDARHVV KVEYQENGPL FSELKFYQRV AKKDCIKKWI ERKQLDYLG I PLFYGSGLTE FKGRSYRFMV MERLGIDLQK ISGQNGTFKK STVLQLGIRM LDVLEYIHEN EYVHGDIKAA NLLLYKPNPD QVYLADYGLS YRYCPNGNHK QYQENPRKGGH NGTIEFTSLD AHKGVALSRR SDVEILGYCM LRWLCGKLPW EQNLKDPVAV QTAKTNLLDE LPQSVLKWAP SGSSCCEIAQ FLVCAHSLAY DEKPNYQALK KILNPHGIPL GPLDFSTKGQ SINVHTPNSQ KVDSQKAATK QVNKAHNRLI EKKVHSERSA ESCATWKVQK EEKLIGLMNN EAAQESTRRR QKYQESQEPL NEVNSFPQKI SYTQFPNSFY EPHQDFTSPD IFKKSRSPSW YKYTSTVSTG ITDLESSTGL WPTISQFTLS EETNADVYYY RIIPVLLML VFLALFFL 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

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, Western Blot

Grade:

custom-made

Target Details

Target:

VRK2

Alternative Name:

VRK2 ([VRK2 Products](#))

Background:

Serine/threonine-protein kinase VRK2 (EC 2.7.11.1) (Vaccinia-related kinase 2),FUNCTION: Serine/threonine kinase that regulates several signal transduction pathways (PubMed:16704422, PubMed:14645249, PubMed:16495336, PubMed:17709393, PubMed:18617507, PubMed:18286207, PubMed:20679487). Isoform 1 modulates the stress response to hypoxia and cytokines, such as interleukin-1 beta (IL1B) and this is dependent on its interaction with MAPK8IP1, which assembles mitogen-activated protein kinase (MAPK) complexes (PubMed:17709393). Inhibition of signal transmission mediated by the assembly of MAPK8IP1-MAPK complexes reduces JNK phosphorylation and JUN-dependent transcription (PubMed:18286207). Phosphorylates 'Thr-18' of p53/TP53, histone H3, and may also phosphorylate MAPK8IP1 (PubMed:16704422). Phosphorylates BANF1 and disrupts its ability to bind DNA and reduces its binding to LEM domain-containing proteins (PubMed:16495336). Down-regulates the transactivation of transcription induced by ERBB2, HRAS, BRAF, and MEK1 (PubMed:20679487). Blocks the phosphorylation of ERK in response to ERBB2 and HRAS

Target Details

(PubMed:20679487). Can also phosphorylate the following substrates that are commonly used to establish in vitro kinase activity: casein, MBP and histone H2B, but it is not sure that this is physiologically relevant (PubMed:14645249). {ECO:0000269|PubMed:14645249, ECO:0000269|PubMed:16495336, ECO:0000269|PubMed:16704422, ECO:0000269|PubMed:17709393, ECO:0000269|PubMed:18286207, ECO:0000269|PubMed:18617507, ECO:0000269|PubMed:20679487},. FUNCTION: [Isoform 2]: Phosphorylates 'Thr-18' of p53/TP53, as well as histone H3. Reduces p53/TP53 ubiquitination by MDM2, promotes p53/TP53 acetylation by EP300 and thereby increases p53/TP53 stability and activity. {ECO:0000269|PubMed:16704422}.

Molecular Weight: 58.1 kDa

UniProt: [Q86Y07](#)

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.

Storage: -80 °C

Storage Comment: Store at -80°C.

Expiry Date: 12 months