

Datasheet for ABIN7545147
VRK3 Protein (AA 1-474) (His tag)



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Overview

| | |
|-------------------------------|---|
| Quantity: | 1 mg |
| Target: | VRK3 |
| Protein Characteristics: | AA 1-474 |
| Origin: | Human |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This VRK3 protein is labelled with His tag. |

Product Details

| | |
|--------------|--|
| Purpose: | Custom-made recombinant VRK3 Protein expressed in mammalian cells. |
| Sequence: | MISFCPDCGK SIQAAFKFCP YCGNSLPVEE HVGSQTFVNP HVSSFQGSKR GLNSSFETSP KKVKWSSTVT SPRLSLFSDG DSESEDTLS SSERSKGS GS RPPTPKSSPQ KTRKSPQVTR GSPQKTSCSP QKTRQSPQTL KRSRVTTSL E ALPTGTVLTD KSGRQWKLKS FQTRDNQGIL YEAAPTSTLT CDSGPQKQKF SLKLDKADGR LFNEQNFFQR AAKPLQVNKW KKLSTPLLA IPTCMGFGVH QDKYRFLVLP SLGRSLQSAL DVSPKHLVSE RSVLQVACRL LDALEFLHEN EYVHGNVTAE NIFVDPEDQS QVTLAGYGFA FRYCPSGKHV AYVEGSRSPH EGDLEFISMD LHKGCGPSRR SDLQSLGYCM LKWLYGFLPW TNCLPNTEDI MKQKQKFV DK PGPFGPCGH WIRPSETLQK YLKVVMALTY EEKPPYAMLR NNLEALLQDL RVSPYDPIGL PMVP 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 |

Product Details

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:

VRK3

Alternative Name:

VRK3 ([VRK3 Products](#))

Background:

Serine/threonine-protein kinase VRK3 (EC 2.7.11.22) (Vaccinia-related kinase 3),FUNCTION: Plays a role in the regulation of the cell cycle by phosphorylating the nuclear envelope protein barrier-to-autointegration factor/BAF that is required for disassembly and reassembly, respectively, of the nuclear envelope during mitosis (PubMed:25899223). Under normal physiological conditions, negatively regulates ERK activity along with VHR/DUSP3 phosphatase in the nucleus, causing timely and transient action of ERK. Stress conditions activate CDK5 which phosphorylates VRK3 to increase VHR phosphatase activity and suppress prolonged ERK activation that causes cell death (PubMed:27346674). For example, upon glutamate induction, promotes nuclear localization of HSP70/HSPA1A to inhibit ERK activation via VHR/DUSP3 phosphatase (PubMed:27941812). {ECO:0000250|UniProtKB:Q8K3G5, ECO:0000269|PubMed:14645249, ECO:0000269|PubMed:19141289, ECO:0000269|PubMed:25899223, ECO:0000269|PubMed:27346674,

Target Details

ECO:0000269|PubMed:27941812}.

Molecular Weight: 52.9 kDa

UniProt: [Q8IV63](#)

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