

Datasheet for ABIN7555865

TRPA1 Protein (AA 1-1119) (His tag)



[Go to Product page](#)

Overview

Quantity:	1 mg
Target:	TRPA1
Protein Characteristics:	AA 1-1119
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRPA1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat TRPA1 Protein expressed in mammalian cells.
Sequence:	<p>MKRSRLKMW R PGEKKEPQGV VYEDVPDDTE DFKESLKVV F EGSAYGLQNF NKQKKLK RCD</p> <p>DMDTFFLHYA AAEGQIELME KITRDSSLEV LHEMDDYGNT PLHCAVEKNQ IESVKFLLSR</p> <p>GANPNLRNFN MMAPLHIAVQ GMNNEVMKVL LEHRTIDVNL EGENGNTAVI IACTTNNSEA</p> <p>LQILLKKGAK PCKSNKWGCF PIHQAAFSGS KECMEILRF GEEHGYSRQL HINFMNNGKA</p> <p>TPLHLAVQNG DLEMIKMCLD NGAQIDPVEK GRCTAIHFAA TQGATEIVKL MISSYSGSVD</p> <p>IVNTTDGCHE TMLHRASLFD HHELADYLIS VGADINKIDS EGRSPILAT ASASWNIVNL</p> <p>LLSKGAQVDI KDNFGRNFLH LTVQQPYGLK NLRPEFMQMQ QIKELVMDED NDGCTPLHYA</p> <p>CRQGGPGSVN NLLGFNVSIH SKSKDKKSPL HFAASYGRIN TCQRLQLDIS DTRLLNEGDL</p> <p>HGMTPLHLAA KNGHDKVVQL LLKKGALFLS DHNGWTALHH ASMGGYTQTM KVILDTNLKC</p> <p>TDRLEDGNT ALHFAAREGH AKAVALLLSH NADIVLNKQQ ASFLHLALHN KRKEVLTII</p> <p>RSKRWDECLK IFSHNSPGNK CPITEMIEYL PECMKVLLDF CMLHSTEDKS CRDYYIEYNF</p>

KYLQCPLEFT KKTPTQDVIY EPLTALNAMV QNNRIELLNH PVCKEYLLMK WLAYGFRAHM
MNLGSYCLGL IPMTILVVNI KPGMAFNSTG IINETS DHSE ILDTTNSYLI KTCMILVFLS
SIFGYCKEAG QIFQQRNYF MDISNVLEWI IYTTGIIFVL PLFVEIPAH LQWQCGAIAVY
FYWMNFLLYL QRFENCGIFI VMLEVILKTL LRSTVVFIFL LLAFLGLSFYI LLNLQDPFSS PLLSIIQTFS
MMLGDINYRE SFLEPYLRNE LAHPVLSFAQ LVSFTIFVPI VLMNLLIGLA VGDIAEVQKH
ASLKRIAMQV ELHTSLEKKL PLWFLRKVDQ KSTIVYPNKP RSGGMLFHIF CFLFCTGEIR
QEIPNADKSL EMEILKQKYR LKDLTFLEK QHELIKLIQ KMEISETED DDSHCSFQDR
FKKEQMEQRN SRWNTVLRV KAKTHHLEP

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.

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:

TRPA1

Alternative Name:

TRPA1 ([TRPA1 Products](#))

Background:

Transient receptor potential cation channel subfamily A member 1 (Ankyrin-like with transmembrane domains protein 1) (Transformation-sensitive protein p120) (p120) (Wasabi

Target Details

receptor),FUNCTION: Receptor-activated non-selective cation channel involved in pain detection and possibly also in cold perception, oxygen concentration perception, cough, itch, and inner ear function (PubMed:21873995, PubMed:23199233, PubMed:25389312, PubMed:25855297). Shows 8-fold preference for divalent over monovalent cations (PubMed:31447178). Has a central role in the pain response to endogenous inflammatory mediators and to a diverse array of irritants, such as allylthiocyanate (AITC) from mustard oil or wasabi, cinnamaldehyde, diallyl disulfide (DADS) from garlic, and acrolein, an irritant from tears gas and vehicle exhaust fumes (PubMed:25389312, PubMed:27241698, PubMed:30878828, PubMed:20547126). Acts also as an ionotropic cannabinoid receptor by being activated by delta(9)-tetrahydrocannabinol (THC), the psychoactive component of marijuana (PubMed:25389312). Is activated by a large variety of structurally unrelated electrophilic and non-electrophilic chemical compounds. Electrophilic ligands activate TRPA1 by interacting with critical N-terminal Cys residues in a covalent manner, whereas mechanisms of non-electrophilic ligands are not well determined. May be a component for the mechanosensitive transduction channel of hair cells in inner ear, thereby participating in the perception of sounds. Probably operated by a phosphatidylinositol second messenger system (By similarity). {ECO:0000250|UniProtKB:Q8BLA8, ECO:0000269|PubMed:20547126, ECO:0000269|PubMed:21873995, ECO:0000269|PubMed:25389312, ECO:0000269|PubMed:25855297, ECO:0000269|PubMed:27241698, ECO:0000269|PubMed:30878828, ECO:0000269|PubMed:31447178, ECO:0000305|PubMed:23199233}.

Molecular Weight: 127.5 kDa

UniProt: [075762](#)

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