

Datasheet for ABIN3118690

FLRT3 Protein (AA 29-649) (rho-1D4 tag)



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1 Image

Overview

Quantity:	1 mg
Target:	FLRT3
Protein Characteristics:	AA 29-649
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FLRT3 protein is labelled with rho-1D4 tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB), ELISA, Crystallization (Crys)

Product Details

Sequence:	<p>KSCPSVCRCD AGFIYCNDRF LTSIPTGIPE DATTLYLQNN QINNAGIPSD LKNLLKVERI</p> <p>YLYHNSLDEF PTNLPKYVKE LHLQENNIRT ITYDSLSKIP YLEELHLDDN SVSAVSIEEG</p> <p>AFRDSNYLRL LFLSRNHLST IPWGLPRTIE ELRLDDNRIS TISSPSLQGL TSLKRLVLDG</p> <p>NLLNNHGLGD KVFFNLVNLT ELSLVRNSLT AAPVNLPGTN LRKLYLQDNH INRVPPNAFS</p> <p>YLRQLYRLDM SNNNLSNLPQ GIFDDLNDIT QLILRNNPWY CGCKMKWVRD WLQSLPVKVN</p> <p>VRGLMCQAPE KVRGMAIKDL NAEFLDCKDS GIVSTIQITT AIPNTVYPAQ GQWPAPVTKQ</p> <p>PDIKNPCLK DHQTTGSPSR KTITITVKS TSDTIHISWK LALPMTALRL SWLKLGHSPA</p> <p>FGSITETIVT GERSEYLVTA LEPDSPYKVC MVPMETSNLY LFDETPVCIE TETAPLRMYN</p> <p>PTTLNREQE KEPYKNPNLP LAAIIGGAVA LVTIALLALV CWYVHRNGSL FSRNCAYSKG</p> <p>RRRKDDYAEA GTKKDNSILE IRETSFQMLP ISNEPISKEE FVIHTIFPPN GMNLYKNNHS</p> <p>ESSNRSYRD SGIPSDHSH S</p>
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Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a

special request, please contact us.

Characteristics:

- Made in Germany - from design to production - by highly experienced protein experts.
- Human FLRT3 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade.
- 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 will ensure that you receive a correctly folded protein.

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.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receipt of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm. The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:

Three step purification of membrane proteins expressed in baculovirus infected SF9 insect cells:

1. Membrane proteins are fractionated by ultracentrifugation and subsequently solubilized with different detergents (detergent screen). Samples are analyzed by Western blot.
2. The best performing detergent is used for solubilization and the proteins are purified via their rho1D4 tag via two rho1D4 antibody columns: one DTT resistant, the other one not. Eluate fractions are analyzed by Western blot.
3. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Protein is endotoxin-free.

Product Details

Grade: Crystallography grade

Target Details

Target: FLRT3

Alternative Name: FLRT3 ([FLRT3 Products](#))

Background: Functions in cell-cell adhesion, cell migration and axon guidance, exerting an attractive or repulsive role depending on its interaction partners. Plays a role in the spatial organization of brain neurons. Plays a role in vascular development in the retina (By similarity). Plays a role in cell-cell adhesion via its interaction with ADGRL3 and probably also other latrophilins that are expressed at the surface of adjacent cells (PubMed:26235030). Interaction with the intracellular domain of ROBO1 mediates axon attraction towards cells expressing NTN1. Mediates axon growth cone collapse and plays a repulsive role in neuron guidance via its interaction with UNC5B, and possibly also other UNC-5 family members (By similarity). Promotes neurite outgrowth (in vitro) (PubMed:14706654). Mediates cell-cell contacts that promote an increase both in neurite number and in neurite length. Plays a role in the regulation of the density of glutamergic synapses. Plays a role in fibroblast growth factor-mediated signaling cascades. Required for normal morphogenesis during embryonic development, but not for normal embryonic patterning. Required for normal ventral closure, headfold fusion and definitive endoderm migration during embryonic development. Required for the formation of a normal basement membrane and the maintenance of a normal anterior visceral endoderm during embryonic development (By similarity). {ECO:0000250|UniProtKB:B1H234, ECO:0000250|UniProtKB:Q8BGT1, ECO:0000269|PubMed:14706654, ECO:0000269|PubMed:26235030}.

Molecular Weight: 71.2 kDa Including tag.

UniProt: [Q9NZU0](#)

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.

Comment: In cases in which it is highly likely that the recombinant protein with the default tag will be insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to increase solubility. We will discuss all possible options with you in detail to assure that you

Application Details

receive your protein of interest.

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value 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:	Unlimited (if stored properly)

Images



Image 1. „Crystallography Grade“ protein due to multi-step, protein-specific purification process