

Datasheet for ABIN3133087

FGFR1 Protein (AA 22-822) (rho-1D4 tag)[Go to Product page](#)**1** Image

Overview

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| Quantity: | 1 mg |
| Target: | FGFR1 |
| Protein Characteristics: | AA 22-822 |
| Origin: | Mouse |
| Source: | Insect Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This FGFR1 protein is labelled with rho-1D4 tag. |
| Application: | Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys) |

Product Details

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| Sequence: | RPAPTLPEQA QPWGVPVEVE SLLVHPGDLL QLRCRLRDDV QSINWLRDGV QLVESNRTRI TGEEVEVRDS IPADSGLYAC VTSSPSGSDT TYFSVNVSDA LPSEDDDDDD DDSSEEKET DNTKPNRRPV APYWTSPEKM EKKLHAVPAA KTVKFKCPSS GTPNPTLRWL KNGKEFKPDH RIGGYKVRYA TWSIIMDSVV PSDKGNYTCI VENEYGSINH TYQLDVVERS PHRPILQAGL PANKTVALGS NVEFMCKVYS DPQPHIQWLK HIEVNGSKIG PDNLPLYVQIL KTAGVNTTDK EMEVLHLRNV SFEDAGEYTC LAGNSIGLSH HSAWLTVLEA LEERPAVMTS PLYLEIIYIC TGAFLISCML GSVIIYKMKS GTKKSDFHSQ MAVHKLAKSI PLRRQVTVSA DSSASMNSGV LLVRPSRLSS SGTPLLAGVS EYELPEDPRW ELPRDRLVLG KPLGEGCFGQ VVLAEAIGLD KDKPNRVTKV AVKMLKSDAT EKDLSDLISE MEMMKMIGKH KNIINLLGAC TQDGPLYVIV EYASKGNLRE YLQARRPPGL EYCYNPSHNP EEQLSSKDLV SCAYQVARGM EYLASKKCIH RDLAARNVLV TEDNVMKIAD FGLARDIHHI DYYKKTNGR LPVKWMAPEA LFDRIYTHQS DVWSFGVLLW EIFTLGGSPY PGPVVEELFK LLKEGHRMDK PSNCTNELYM MMRDCWHAVP |
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SQRPTFKQLV EDLDRIVALT SNQEYLDLSI PLDQYSPSFP DTRSSTCSSG EDSVFSHEPL
PEEPCLPRHP TQLANGLKR R

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.
- Mouse Fgfr1 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.

Product Details

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| Sterility: | 0.22 µm filtered |
| Endotoxin Level: | Protein is endotoxin-free. |
| Grade: | Crystallography grade |

Target Details

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| Target: | FGFR1 |
| Alternative Name: | Fgfr1 (FGFR1 Products) |
| Background: | <p>Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of embryonic development, cell proliferation, differentiation and migration. Required for normal mesoderm patterning and correct axial organization during embryonic development, normal skeletogenesis and normal development of the gonadotropin-releasing hormone (GnRH) neuronal system. Phosphorylates PLCG1, FRS2, GAB1 and SHB. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Promotes phosphorylation of SHC1, STAT1 and PTPN11/SHP2. In the nucleus, enhances RPS6KA1 and CREB1 activity and contributes to the regulation of transcription. FGFR1 signaling is down-regulated by IL17RD/SEF, and by FGFR1 ubiquitination, internalization and degradation (By similarity). {ECO:0000250 UniProtKB:P11362, ECO:0000269 PubMed:10821861, ECO:0000269 PubMed:10896947, ECO:0000269 PubMed:1309590, ECO:0000269 PubMed:17086194, ECO:0000269 PubMed:8001822, ECO:0000269 PubMed:8001823}.</p> |
| Molecular Weight: | 90.8 kDa Including tag. |
| UniProt: | P16092 |
| Pathways: | RTK Signaling , Fc-epsilon Receptor Signaling Pathway , EGFR Signaling Pathway , Neurotrophin Signaling Pathway , Sensory Perception of Sound , Stem Cell Maintenance , S100 Proteins |

Application Details

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| 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 |
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Application Details

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| | though. |
| Comment: | Protein has not been tested for activity yet. 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 receive your protein of interest. |
| Restrictions: | For Research Use only |

Handling

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| 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