## Overview

| Quantity: | 1 mg |
| :--- | :--- |
| Target: | FZD8 |
| Protein Characteristics: | AA 28-272 |
| Origin: | Mouse |
| Source: | Insect Cells |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This FZD8 protein is labelled with His tag. |
| Application: | ELISA, Western Blotting (WB), Crystallization (Crys), SDS-PAGE (SDS) |

Product Details

ASAKELACQE ITVPLCKGIG YNYTYMPNQF NHDTQDEAGL EVHQFWPLVE IQCSPDLKFF LCSMYTPICL EDYKKPLPPC RSVCERAKAG CAPLMRQYGF AWPDRMRCDR LPEQGNPDTL CMDYNRTDLT TAAPSPPRRL PPPPPPGEQP PSGSGHSRPP GARPPHRGGS SRGSGDAAAA PPSRGGKARP PGGGAAPCEP GCQCRAPMVS VSSERHPLYN RVKTGQIANC ALPCHNPFFS QDERA

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 Fzd8 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 receival 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 280 nm . 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: | Two step purification of proteins expressed in baculovirus infected SF9 insect cells: |
|  | 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE. |
|  | 2. 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: | $0.22 \mu \mathrm{~m}$ filtered |
| Endotoxin Level: | Protein is endotoxin free. |
| Grade: | Crystallography grade |
| Target Details |  |
| Target: | FZD8 |
| Alternative Name: | Fzd8 (FZD8 Products) |
| Background: | Receptor for Wnt proteins. Component of the Wnt-Fzd-LRP5-LRP6 complex that triggers betacatenin signaling through inducing aggregation of receptor-ligand complexes into ribosome- |


|  | sized signalsomes (By similarity). The beta-catenin canonical signaling pathway leads to the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of betacatenin and activation of Wnt target genes. A second signaling pathway involving PKC and calcium fluxes has been seen for some family members, but it is not yet clear if it represents a distinct pathway or if it can be integrated in the canonical pathway, as PKC seems to be required for Wht-mediated inactivation of GSK-3 kinase. Both pathways seem to involve interactions with G-proteins. May be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and/or in differentiated tissues. Coreceptor along with RYK of Wnt proteins, such as WNT1. \{ECO:0000250, <br> ECO:0000269\|PubMed:10097073, ECO:0000269|PubMed:10395542, <br> ECO:0000269\|PubMed:15454084, ECO:0000269|PubMed:16543246\}. |
| :---: | :---: |
| Molecular Weight: | 27.6 kDa Including tag. |
| UniProt: | Q61091 |
| Pathways: | WNT Signaling |
| 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 gurantee 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 |  |
| Format: | Liquid |
| Buffer: | $100 \mathrm{mM} \mathrm{NaCL}, 20 \mathrm{mM}$ Hepes, $10 \%$ glycerol. pH value is at the discretion of the manufacturer. |
| Handling Advice: | Avoid repeated freeze-thaw cycles. |
| Storage: | $-80^{\circ} \mathrm{C}$ |
| Storage Comment: | Store at $-80^{\circ} \mathrm{C}$. |



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

