

## Datasheet for ABIN3113503

# FLT3 Protein (AA 27-993) (rho-1D4 tag)



## Overview

Quantity:	1 mg
Target:	FLT3
Protein Characteristics:	AA 27-993
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FLT3 protein is labelled with rho-1D4 tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)

### **Product Details**

Sequence:

NQDLPVIKCV LINHKNNDSS VGKSSSYPMV SESPEDLGCA LRPQSSGTVY EAAAVEVDVS
ASITLQVLVD APGNISCLWV FKHSSLNCQP HFDLQNRGVV SMVILKMTET QAGEYLLFIQ
SEATNYTILF TVSIRNTLLY TLRRPYFRKM ENQDALVCIS ESVPEPIVEW VLCDSQGESC
KEESPAVVKK EEKVLHELFG TDIRCCARNE LGRECTRLFT IDLNQTPQTT LPQLFLKVGE
PLWIRCKAVH VNHGFGLTWE LENKALEEGN YFEMSTYSTN RTMIRILFAF VSSVARNDTG
YYTCSSSKHP SQSALVTIVE KGFINATNSS EDYEIDQYEE FCFSVRFKAY PQIRCTWTFS
RKSFPCEQKG LDNGYSISKF CNHKHQPGEY IFHAENDDAQ FTKMFTLNIR RKPQVLAEAS
ASQASCFSDG YPLPSWTWKK CSDKSPNCTE EITEGVWNRK ANRKVFGQWV SSSTLNMSEA
IKGFLVKCCA YNSLGTSCET ILLNSPGPFP FIQDNISFYA TIGVCLLFIV VLTLLICHKY
KKQFRYESQL QMVQVTGSSD NEYFYVDFRE YEYDLKWEFP RENLEFGKVL GSGAFGKVMN
ATAYGISKTG VSIQVAVKML KEKADSSERE ALMSELKMMT QLGSHENIVN LLGACTLSGP
IYLIFEYCCY GDLLNYLRSK REKFHRTWTE IFKEHNFSFY PTFOSHPNSS MPGSREVQIH

PDSDQISGLH GNSFHSEDEI EYENQKRLEE EEDLNVLTFE DLLCFAYQVA KGMEFLEFKS
CVHRDLAARN VLVTHGKVVK ICDFGLARDI MSDSNYVVRG NARLPVKWMA PESLFEGIYT
IKSDVWSYGI LLWEIFSLGV NPYPGIPVDA NFYKLIQNGF KMDQPFYATE EIYIIMQSCW
AFDSRKRPSF PNLTSFLGCQ LADAEEAMYQ NVDGRVSECP HTYQNRRPFS REMDLGLLSP
QAQVEDS

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 FLT3 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 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 fractioned 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

## **Product Details**

	through size exclusion chromatograph. 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.
Grade:	Crystallography grade
Target Details	
Target:	FLT3
Alternative Name:	FLT3 (FLT3 Products)
Background:	Tyrosine-protein kinase that acts as cell-surface receptor for the cytokine FLT3LG and regulated differentiation, proliferation and survival of hematopoietic progenitor cells and of dendritic cells Promotes phosphorylation of SHC1 and AKT1, and activation of the downstream effector MTOR. Promotes activation of RAS signaling and phosphorylation of downstream kinases, including MAPK1/ERK2 and/or MAPK3/ERK1. Promotes phosphorylation of FES, FER, PTPN6/SHP, PTPN11/SHP-2, PLCG1, and STAT5A and/or STAT5B. Activation of wild-type FLT3 causes only marginal activation of STAT5A or STAT5B. Mutations that cause constitutive kinase activity promote cell proliferation and resistance to apoptosis via the activation of multiple signaling pathways. {ECO:0000269 PubMed:10080542, ECO:0000269 PubMed:11090077, ECO:0000269 PubMed:14504097, ECO:0000269 PubMed:16266983, ECO:0000269 PubMed:16627759, ECO:0000269 PubMed:18490735, ECO:0000269 PubMed:20111072, ECO:0000269 PubMed:21067588, ECO:0000269 PubMed:21262971, ECO:0000269 PubMed:21516120, ECO:0000269 PubMed:7507245}.
Molecular Weight:	111.4 kDa Including tag.
UniProt:	P36888
Pathways:	RTK 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.

# **Application Details**

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
	receive your protein of interest.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Format: Buffer:	Liquid  100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Buffer: Handling Advice:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.  Avoid repeated freeze-thaw cycles.