

## Datasheet for ABIN3080180

# FGD2 Protein (AA 1-655) (Strep Tag)



### Overview

Quantity:	250 μg
Target:	FGD2
Protein Characteristics:	AA 1-655
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This FGD2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Brand:	AliCE®
Sequence:	MKGASEEKLA SVSNLVTVFE NSRTPEAAPR GQRLEDVHHR PECRPPESPG PREKTNVGEA
	VGSEPRTVSR RYLNSLKNKL SSEAWRKSCQ PVTLSGSGTQ EPEKKIVQEL LETEQAYVAR
	LHLLDQVFFQ ELLKTARSSK AFPEDVVRVI FSNISSIYQF HSQFFLPELQ RRLDDWTANP
	RIGDVIQKLA PFLKMYSEYV KNFERAAELL ATWTDKSPLF QEVLTRIQSS EASGSLTLQH
	HMLEPVQRIP RYELLLKEYI QKLPAQAPDQ ADAQKALDMI FSAAQHSNAA ITEMERLQDL
	WEVYQRLGLE DDIVDPSNTL LREGPVLKIS FRRNDPMERY LFLFNNMLLY CVPRVIQVGA
	QFQVRTRIDV AGMKVRELMD AEFPHSFLVS GKQRTLELQA RSQEEMISWM QAFQAAIDQI
	EKRNETFKAA AQGPEGDIQE QELQSEELGL RAPQWVRDKM VTMCMRCQEP FNALTRRRHH
	CRACGYVVCA RCSDYRAELK YDDNRPNRVC LHCYAFLTGN VLPEAKEDKR RGILEKGSSA
	TPDQSLMCSF LQLIGDKWGK SGPRGWCVIP RDDPLVLYVY AAPQDMRAHT SIPLLGYQVT
	VGPQGDPRVF QLQQSGQLYT FKAETEELKG RWVKAMERAA SGWSPSWPND GDLSD

Sequence without tag. The proposed Strep-Tag is based on experience s 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 in Germany from design to production by highly experienced protein experts.
- · Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- 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.

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.

#### Expression System:

- ALICE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require posttranslational modifications.
- During lysate production, the cell wall and other cellular components that are not required for
  protein production are removed, leaving only the protein production machinery and the
  mitochondria to drive the reaction. During our lysate completion steps, the additional
  components needed for protein production (amino acids, cofactors, etc.) are added to
  produce something that functions like a cell, but without the constraints of a living system all that's needed is the DNA that codes for the desired protein!

#### Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- · The protein's absorbance will be measured against its specific reference buffer.
- · We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Product Details	
Grade:	custom-made
Target Details	
Target:	FGD2
Alternative Name:	FGD2 (FGD2 Products)
Background:	FYVE, RhoGEF and PH domain-containing protein 2 (Zinc finger FYVE domain-containing protein 4),FUNCTION: Activates CDC42, a member of the Ras-like family of Rho- and Rac proteins, by exchanging bound GDP for free GTP. Activates JNK1 via CDC42 but not RAC1. Binds to phosphatidylinositol 4,5-bisphosphate, phosphatidylinositol 3,4,5-trisphosphate, phosphatidylinositol 5-monophosphate, phosphatidylinositol 4-monophosphate and phosphatidylinositol 3-monophosphate (By similarity). {ECO:0000250}.
Molecular Weight:	74.9 kDa
UniProt:	Q7Z6J4
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:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum c.v This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.  During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only
Handling	
Format:	Liquid

## Handling

Buffer:	The buffer composition is at the discretion of the manufacturer.  Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months