

# Datasheet for ABIN7564879 **FOXP3 Protein (AA 1-429) (His tag)**



#### Overview

Quantity:	1 mg
Target:	FOXP3
Protein Characteristics:	AA 1-429
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This FOXP3 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

### **Product Details**

Purpose:	Custom-made recombinat Foxp3 Protein expressed in mammalien cells.
Sequence:	MPNPRPAKPM APSLALGPSP GVLPSWKTAP KGSELLGTRG SGGPFQGRDL RSGAHTSSSL
	NPLPPSQLQL PTVPLVMVAP SGARLGPSPH LQALLQDRPH FMHQLSTVDA HAQTPVLQVR
	PLDNPAMISL PPPSAATGVF SLKARPGLPP GINVASLEWV SREPALLCTF PRSGTPRKDS
	NLLAAPQGSY PLLANGVCKW PGCEKVFEEP EEFLKHCQAD HLLDEKGKAQ CLLQREVVQS
	LEQQLELEKE KLGAMQAHLA GKMALAKAPS VASMDKSSCC IVATSTQGSV LPAWSAPREA
	PDGGLFAVRR HLWGSHGNSS FPEFFHNMDY FKYHNMRPPF TYATLIRWAI LEAPERQRTL
	NEIYHWFTRM FAYFRNHPAT WKNAIRHNLS LHKCFVRVES EKGAVWTVDE FEFRKKRSQR
	PNKCSNPCP Sequence without tag. The proposed Purification-Tag is based on experiences
	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 to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalien cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- 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.

If you are not interested in a full length protein, please contact us for individual protein fragments.

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.

Purity:

> 90 % as determined by Bis-Tris Page, Western Blot

Grade:

custom-made

#### **Target Details**

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Target:	FOXP3

#### Alternative Name:

Foxp3 (FOXP3 Products)

Background:

Forkhead box protein P3 (Scurfin) [Cleaved into: Forkhead box protein P3, C-terminally processed, Forkhead box protein P3 41 kDa form], FUNCTION: Transcriptional regulator which is crucial for the development and inhibitory function of regulatory T-cells (Treg) (PubMed:22813742). Plays an essential role in maintaining homeostasis of the immune system by allowing the acquisition of full suppressive function and stability of the Treg lineage, and by directly modulating the expansion and function of conventional T-cells. Can act either as a transcriptional repressor or a transcriptional activator depending on its interactions with other transcription factors, histone acetylases and deacetylases. The suppressive activity of Treg involves the coordinate activation of many genes, including CTLA4 and TNFRSF18 by FOXP3 along with repression of genes encoding cytokines such as interleukin-2 (IL2) and interferongamma (IFNG). Inhibits cytokine production and T-cell effector function by repressing the activity of two key transcription factors, RELA and NFATC2 (PubMed:15790681). Mediates transcriptional repression of IL2 via its association with histone acetylase KAT5 and histone deacetylase HDAC7 (By similarity). Can activate the expression of TNFRSF18, IL2RA and CTLA4

and repress the expression of IL2 and IFNG via its association with transcription factor RUNX1 $$			
(PubMed:17377532). Inhibits the differentiation of IL17 producing helper T-cells (Th17) by			
antagonizing RORC function, leading to down-regulation of IL17 expression, favoring Treg			
development (PubMed:18368049). Inhibits the transcriptional activator activity of RORA (By			
similarity). Can repress the expression of IL2 and IFNG via its association with transcription			
factor IKZF4 (PubMed:19696312). {ECO:0000250 UniProtKB:Q9BZS1,			
ECO:0000269 PubMed:15790681, ECO:0000269 PubMed:17377532,			
ECO:0000269 PubMed:18368049, ECO:0000269 PubMed:19696312,			
ECO:0000269 PubMed:22813742}.			

Molecular Weight: 47.3 kDa

UniProt: Q99JB6

Pathways: Chromatin Binding, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Production of Molecular Mediator of Immune Response, Activated T

## **Application Details**

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.

Restrictions: For Research Use only

**Cell Proliferation** 

## Handling

Format:	Liquid
Buffer:	The buffer composition 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:	12 months