

## Datasheet for ABIN7550817

# POU4F2 Protein (AA 1-409) (His tag)



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Quantity:	1 mg
Target:	POU4F2
Protein Characteristics:	AA 1-409
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This POU4F2 protein is labelled with His tag.

## **Product Details**

Purpose:	Custom-made recombinant POU4F2 Protein expressed in mammalian cells.		
Sequence:	MMMMSLNSKQ AFSMPHGGSL HVEPKYSALH STSPGSSAPI APSASSPSSS SNAGGGGGGG		
	GGGGGGGRS SSSSSGSSG GGGSEAMRRA CLPTPPSNIF GGLDESLLAR AEALAAVDIV		
	SQSKSHHHHP PHHSPFKPDA TYHTMNTIPC TSAASSSSVP ISHPSALAGT HHHHHHHHHH		
	HHQPHQALEG ELLEHLSPGL ALGAMAGPDG AVVSTPAHAP HMATMNPMHQ AALSMAHAHG		
	LPSHMGCMSD VDADPRDLEA FAERFKQRRI KLGVTQADVG SALANLKIPG VGSLSQSTIC		
	RFESLTLSHN NMIALKPILQ AWLEEAEKSH REKLTKPELF NGAEKKRKRT SIAAPEKRSL		
	EAYFAIQPRP SSEKIAAIAE KLDLKKNVVR VWFCNQRQKQ KRMKYSAGI 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.		
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different		
	isoform, please contact us regarding an individual offer.		

#### Characteristics:

Key Benefits:

- Made to order protein from design to production by highly experienced protein experts.
- · Protein expressed in mammalian 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, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

#### Grade:

custom-made

### **Target Details**

#### Target:

POU4F2

#### Alternative Name:

POU4F2 (POU4F2 Products)

## Background:

POU domain, class 4, transcription factor 2 (Brain-specific homeobox/POU domain protein 3B) (Brain-3B) (Brn-3B), FUNCTION: Tissue-specific DNA-binding transcription factor involved in the development and differentiation of target cells (PubMed:19266028, PubMed:23805044). Functions either as activator or repressor modulating the rate of target gene transcription through RNA polymerase II enzyme in a promoter-dependent manner (PubMed:19266028, PubMed:23805044). Binds to the consensus octamer motif 5'-AT[A/T]A[T/A]T[A/T]A-3' of promoter of target genes. Plays a fundamental role in the gene regulatory network essential for retinal ganglion cell (RGC) differentiation. Binds to an octamer site to form a ternary complex with ISL1, cooperates positively with ISL1 and ISL2 to potentiate transcriptional activation of RGC target genes being involved in RGC fate commitment in the developing retina and RGC axon formation and pathfinding. Inhibits DLX1 and DLX2 transcriptional activities preventing DLX1- and DLX2-mediated ability to promote amacrine cell fate specification. In cooperation with TP53 potentiates transcriptional activation of BAX promoter activity increasing neuronal

cell apoptosis. Negatively regulates BAX promoter activity in the absence of TP53. Acts as a transcriptional coactivator via its interaction with the transcription factor ESR1 by enhancing its effect on estrogen response element (ERE)-containing promoter. Antagonizes the transcriptional stimulatory activity of POU4F1 by preventing its binding to an octamer motif. Involved in TNFSF11-mediated terminal osteoclast differentiation (By similarity). {ECO:0000250|UniProtKB:Q63934, ECO:0000269|PubMed:19266028, ECO:0000269|PubMed:23805044}.

Molecular Weight: 43.1 kDa
UniProt: Q12837

Intracellular Steroid Hormone Receptor Signaling Pathway, Sensory Perception of Sound

# **Application Details**

Application Notes: We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Restrictions: For Research Use only

# Handling

Pathways:

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	