

Datasheet for ABIN7549886

## NK2 Homeobox 5 Protein (NKX2-5) (AA 1-324) (His tag)



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### Overview

Quantity:	1 mg
Target:	NK2 Homeobox 5 (NKX2-5)
Protein Characteristics:	AA 1-324
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NK2 Homeobox 5 protein is labelled with His tag.

### Product Details

Purpose:	Custom-made recombinant NKX2-5 Protein expressed in mammalian cells.
Sequence:	<p>MFPSALTPT PFSVKDILNL EQQQRSLAAA GELSARLEAT LAPSSCMLAA FKPEAYAGPE</p> <p>AAAPGLPELR AELGRAPSPA KCASAFPAAP AFYPRAYSDP DPAKDPRAEK KELCALQKAV</p> <p>ELEKTEADNA ERPRARRRRK PRVLFSQAQV YELERRFKQQ RYLSAPERDQ LASVLKLTST</p> <p>QVKIWFQNRN YKCKRQRQDQ TLELVGLPPP PPPPARRIAV PVLVRDGKPC LGDSAPYAPA</p> <p>YGVGLNPYGY NAYPAYPGYG GAACSPGYSC TAAYPAGPSP AQPATAAANN NFVNFGVGDL</p> <p>NAVQSPGIPQ SNSGVSTLHG IRAW <b>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.</b></p>
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:

## Product Details

- 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:	NK2 Homeobox 5 (NKX2-5)
Alternative Name:	NKX2-5 ( <a href="#">NKX2-5 Products</a> )
Background:	Homeobox protein Nkx-2.5 (Cardiac-specific homeobox) (Homeobox protein CSX) (Homeobox protein NK-2 homolog E),FUNCTION: Transcription factor required for the development of the heart and the spleen (PubMed:22560297). During heart development, acts as a transcriptional activator of NPPA/ANF in cooperation with GATA4 (By similarity). May cooperate with TBX2 to negatively modulate expression of NPPA/ANF in the atrioventricular canal (By similarity). Binds to the core DNA motif of NPPA promoter (PubMed:22849347, PubMed:26926761). Together with PBX1, required for spleen development through a mechanism that involves CDKN2B repression (PubMed:22560297). Positively regulates transcription of genes such as COL3A1 and MMP2, resulting in increased pulmonary endothelial fibrosis in response to hypoxia (PubMed:29899023). {ECO:0000250 UniProtKB:P42582, ECO:0000269 PubMed:22560297, ECO:0000269 PubMed:22849347, ECO:0000269 PubMed:26926761, ECO:0000269 PubMed:29899023}.
Molecular Weight:	34.9 kDa
UniProt:	<a href="#">P52952</a>

## Target Details

Pathways: [Regulation of Muscle Cell Differentiation, Skeletal Muscle Fiber Development](#)

## 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

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