Datasheet for ABIN7563956

SIX2 Protein (AA 1-296) (His tag)

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Overview

Quantity:	1 mg
Target:	SIX2
Protein Characteristics:	AA 1-296
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This SIX2 protein is labelled with His tag.

Product Details

Purpose:	Custom-made recombinant Six2 Protein expressed in mammalian cells.
Sequence:	MSMLPTFGFT QEQVACVCEV LQQGGNIERL GRFLWSLPAC EHLHKNESVL KAKAVVAFHR GNFRELYKIL ESHQFSPHNH AKLQQLWLKA HYIEAEKLRG RPLGAVGKYR VRRKFPLPRS IWDGEETSYC FKEKSRSVLR EWYAHNPYPS PREKRELAEA TGLTTTQVSN WFKNRRQRDR AAEAKERENS ENSNSSSHNP LASSLNGSGK SVLGSSEDEK TPSGTPDHSS SSPALLLSPP PPPGLPSLHS LGHPPGPSAV PVPVPGGGGA DPLQHHHSLQ DSILNPMSAN LVDLGS **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:

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:	SIX2
Alternative Name:	Six2 (SIX2 Products)
Background:	Homeobox protein SIX2 (Sine oculis homeobox homolog 2),FUNCTION: Transcription factor that plays an important role in the development of several organs, including kidney, skull and stomach. During kidney development, maintains cap mesenchyme multipotent nephron progenitor cells in an undifferentiated state by opposing the inductive signals emanating from the ureteric bud and cooperates with WNT9B to promote renewing progenitor cells proliferation. Acts through its interaction with TCF7L2 and OSR1 in a canonical Wnt signaling independent manner preventing transcription of differentiation genes in cap mesenchyme such as WNT4. Also acts independently of OSR1 to activate expression of many cap mesenchyme genes, including itself, GDNF and OSR1. During craniofacial development plays a role in growth and elongation of the cranial base through regulation of chondrocyte differentiation (PubMed:20515681). During stomach organogenesis, controls pyloric sphincter formation and mucosal growth through regulation of a gene network including NKX2-5, BMPR1B, BMP4, SOX9 and GREM1 (PubMed:19660448). During branchial arch development, acts to mediate HOXA2 control over the insulin-like growth factor pathway (PubMed:18321982). May also be involved in

Target Details

	limb tendon and ligament development (PubMed:7720577). Plays a role in cell proliferation and migration (By similarity). {ECO:0000250|UniProtKB:Q9NPC8, ECO:0000269|PubMed:17036046, ECO:0000269|PubMed:18321982, ECO:0000269|PubMed:18682239, ECO:0000269|PubMed:19660448, ECO:0000269|PubMed:20515681, ECO:0000269|PubMed:21350016, ECO:0000269|PubMed:22902740, ECO:0000269|PubMed:24598167, ECO:0000269|PubMed:7720577}.
Molecular Weight:	32.7 kDa
UniProt:	Q62232
Pathways:	Protein targeting to Nucleus

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