abcam

Product datasheet

Recombinant human SOX2 protein ab169843

1 References

Description

Product name	Recombinant human SOX2 protein
Biological activity	The *in vitro* function was tested using specific DNA binding assays. 11R proteins were reported to successfully generate induced pluripotent stem (iPS) cells from OG2 MEFs.
Purity	> 90 % SDS-PAGE.
Expression system	Escherichia coli
Accession	P48431
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MYNMMETELKPPGPQQTSGGGGGNSTAAAAGGNQKNSP DRVKRPMNAFMV WSRGQRRKMAQENPKMHNSEISKRLGAEWKLLSETEKR PFIDEAKRLRAL HMKEHPDYKYRPRRKTKTLMKKDKYTLPGGLLAPGGNSM ASGVGVGAGLG AGVNQRMDSYAHMNGWSNGSYSMMQDQLGYPQHPGLN AHGAAQMQPMHRY DVSALQYNSMTSSQTYMNGSPTYSMSYSQQGTPGMALG SMGSVVKSEASS SPPVVTSSSHSRAPCQAGDLRDMISMYLPGAEVPEPAAP SRLHMSQHYQS GPVPGTAINGTLPLSHMESGGGGSPGRRRRRRRRRRR
Predicted molecular weight	37 kDa
Amino acids	1 to 317

Specifications

Our Abpromise guarantee covers the use of **ab169843** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies

	SDS-PAGE
Form	Liquid
Additional notes	The *in vitro* function was tested using specific DNA binding assays. 11R proteins were reported to successfully generate induced pluripotent stem (iPS) cells from OG2 MEFs.

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. pH: 7.50 Constituents: Potassium chloride, 0.24% Tris, EDTA, Glycerol, Sodium chloride Also contains DTT and Arginine. This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function	Transcription factor that forms a trimeric complex with OCT4 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206 (By similarity). Critical for early embryogenesis and for embryonic stem cell pluripotency.
Involvement in disease	Defects in SOX2 are the cause of microphthalmia syndromic type 3 (MCOPS3) [MIM:206900]. Microphthalmia is a clinically heterogeneous disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities. MCOPS3 is characterized by the rare association of malformations including uni- or bilateral anophthalmia or microphthalmia, and esophageal atresia with trachoesophageal fistula.
Sequence similarities	Contains 1 HMG box DNA-binding domain.
Post-translational modifications	Sumoylation inhibits binding on DNA and negatively regulates the FGF4 transactivation.
Cellular localization	Nucleus.

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