

# Recombinant human SOX2 protein ab169843

## 4 References

### Description

---

<b>Product name</b>	Recombinant human SOX2 protein
<b>Purity</b>	> 90 % SDS-PAGE.
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P48431</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Human
<b>Sequence</b>	MYNMMETELKPPGPQQTSGGGGGNSTAAAAGGNQKNSP DRVKRPMNAFMV WSRGQRRKMAQENPKMHNSEISKRLGAEWKLLSETEKR PFIDEAKRLRAL HMKEHPDYKYRPRRKTTLMKKDKYTLPGGLLAPGGNSM ASGVGVGAGLG AGVNQRMDSYAHMNGWSNGSYSMMQDQLGYPQHPGLN AHGAAQMQPMHRY DVSALQYNSMTSSQTYMNGSPTYMSYSQQGTPGMALG SMGSVVKSEASS SPPVVTSSSHSRAPCQAGDLRDMISMYLPGAEVPEPAAP SRLHMSQHYQS GPVPGTAINGTLPLSHMESGGGGSPGRRRRRRRRRRRR
<b>Predicted molecular weight</b>	37 kDa
<b>Amino acids</b>	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.

<b>Applications</b>	Functional Studies SDS-PAGE
<b>Form</b>	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.

---

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

---

## Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors