

## Sox2-TAT, Human

**Cat. No.:** Z03327-10

**Size:** 10.0 ug

**Synonyms:** MCOPS3; ANOP3; MGC2413; SOX2; SRY (sex determining region Y)-box 2; (SRY)-box 2

### Description:

Sox2 is a member of the Sox family of transcription factors involved in mammalian development containing a highly conserved 79-residue DNA-binding domain, known as the high mobility group (HMG) box. Sox2 is a transcription factor that forms a trimeric complex with Oct4 and binds to DNA to promote the expression of pluripotent genes involved in self-renewal, while repressing genes involved in cell differentiation. Due to its high pluripotency, Sox2 is a commonly used transcription factor for generating induced-pluripotent stem cells (iPSCs).

Recombinant Human Sox2-TAT produced in HEK293 cells is a polypeptide chain containing 330 amino acids. The rhSox2-TAT has a molecular mass of 50-55 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques at GenScript.

### Amino Acid Sequence:

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00001 MYNMMETELK PPGPQQTSGG GGNSTAAAA GGNQKNSPDR
00041 VKRPMNAFMV WSRGQRRKMA QENPKMHNSE ISKRLGAEWK
00081 LLSETEKRPF IDEAKRLRAL HMKEHPDYKY RPRRKTTLM
00121 KKDKYTLPGG LLAPGGNSMA SGVGVGAGLG AGVNQRMDSY
00161 AHMNGWSNGS YSMMQDQLGY PQHPGLNAHG AAQMPMHRY
00201 DVSALQYNM TSSQTYMNGS PTYSMSYSQQ GTPGMALGSM
00241 GSVVKSEASS SPPVVTSSSH SRAPCQAGDL RDMISMYPG
00281 AEVPEPAAPS RLHMSQHYQS GPVPGTAING TLPLSHMGY
00321 GRKKRRQRRR
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**Source:** HEK 293

**Biological Activity:** Not Available

**Molecular Weight:** 50-55 kDa, observed by reducing SDS-PAGE.

**Formulation:** Lyophilized from a 0.2 µm filtered solution in PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100 µg/ml.

**Purity:** > 95% as analyzed by SDS-PAGE.

**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.

**Storage:** Lyophilized recombinant Human Sox2-TAT remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, Human Sox2-TAT should be stable up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.