Datasheet

Cat. No. P1623

Recombinant Human SOX2-TAT

Information

Gene ID	6657
Accession #	P48431
Alternate Names	SOX2-TAT
Source	Escherichia coli.
M.Wt	Approximately 36.0 kDa, a single non-glycosylated polypeptide chain containing 330 amino acids, including the 317 residues of full-length Sox2 and a 13-residue C-terminal TAT peptide (GGYGRKKRRQRRR).
AA Sequence	MYNMMETELK PPGPQQTSGG GGGNSTAAAA GGNQKNSPDR VKRPMNAFMV WSRGQRRKMA QENPKMHNSE ISKRLGAEWK LLSETEKRPF IDEAKRLRAL HMKEHPDYKY RPRRKTKTLM KKDKYTLPGG LLAPGGNSMA SGVGVGAGLG AGVNQRMDSY AHMNGWSNGS YSMMQDQLGY PQHPGLNAHG AAQMQPMHRY DVSALQYNSM TSSQTYMNGS PTYSMSYSQQ GTPGMALGSM GSVVKSEASS SPPVVTSSSH SRAPCQAGDL RDMISMYLPG AEVPEPAAPS RLHMSQHYQS GPVPGTAING TLPLSHMGGY GRKKRRQRRR
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles - 12 months from date of receipt, -20 to -70 °C as supplied - 1 month, 2 to 8 °C under sterile conditions after reconstitution - 3 months, -20 to -70 °C under sterile conditions after reconstitution
Formulation	Lyophilized from a 0.2 μm filtered concentrated solution in 2 × PBS, pH 7.4, with 5% Trehalose.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Biological Activity	Data Not Available.
Shipping Condition	Gel pack.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

Components and Storage

Components	5μg	100μg	500μg

Recombinant Human SOX2-TAT	5μg	100μg	500μg

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- 12 months from date of receipt, -20 to -70 °C as supplied
- 1 month, 2 to 8 °C under sterile conditions after reconstitution
- 3 months, -20 to -70 °C under sterile conditions after reconstitution

Quality Control

Purity	> 95 % by SDS-PAGE and HPLC analyses.
Endotoxin	Less than 1 EU/μg of rHuSOX2-TAT as determined by LAL method.

Description

Sox2, also named SRY (sex determining region Y)-box 2, is belonging to the Sox family and it is encoded by the Sox gene in human. This protein family shares highly conserved DNA binding domains known as HMG (High-mobility group) box domains containing approximately 80 amino acids. Sox2 plays a role in maintenance of embryonic and neural stem cells and holds great promise in research involving induced pluripotency, an emerging and very promising field of regenerative medicine. Mature human Sox2 shares 100 amino acid sequence identity with murine and rat Sox2. Recombinant human Sox2-TAT expressed in E. coli is a 36 kDa protein containing 330 amino-acid residues, including the 317 residues of full-length Sox2 and a 13-residue C-terminal TAT peptide (GGYGRKKRRQRRR).

Reference

1. M Stevanovic, O Zuffardi, J Collignon, et al. 1994. Mamm Genome, 5: 640-2
2. J Fantes, NK Ragge, SA Lynch, et al. 2003. Nat Genet, 33: 461-3
3. A Rizzino. 2009. Wiley Interdiscip Rev Syst Biol Med, 1: 228-36
4. K Takahashi, K Tanabe, M Ohnuki, et al. 2007. Cell, 131: 861-72.

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