Technical Data Sheet

Flogen® Recombinant Human SOX2-TAT (rHuSOX2-TAT)

Catalog Number: PGR0601-035

Source: *Escherichia coli.*

Molecular Weight: 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).

Quantity: 5μg/25μg/1000μg

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

Purity: > 95 % by SDS-PAGE and HPLC analyses.

Biological Activity: Data Not Available.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation: Lyophilized from a 0.2 μm filtered concentrated solution in 2 × PBS, pH 7.4, with 5% Trehalose.

Endotoxin: Less than 1 EU/μg of rHuSOX2-TAT as determined by LAL method.

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.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. **Avoid repeated freeze/thaw cycles.**

Usage: For research, laboratory or further evaluation purposes. **NOT FOR HUMAN USE.**

Human SOX2-TAT

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 Cterminal TAT peptide (GGYGRKKRRQRRR).