

TECHNICAL DATA SHEET

Recombinant Human Sox2-TAT (Carrier-Free)

Catalog Number: 21-9058

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human Sox2-TAT (Carrier-Free)

DESCRIPTION

Sox2 belongs to a diverse family of structurally-related transcription factors whose primary structure contains a 79-residue DNA-binding domain, called high mobility group (HMG) box. It plays an essential role in maintaining the pluripotency of embryonic stem cells (ESC) and the determination of cell fate. Microarray analysis showed that Sox2 regulates the expression of multiple genes involved in embryonic development, including FGF-4, YES1 and ZFP206.

MOLECULAR MASS

Recombinant Human Sox2-TAT expressed in E. coli is a 36.0 kDa protein containing 330 amino acid residues, including the 317 residues of full-length Sox2 and a 13-residue C-terminal TAT peptide (GGYGRKKRRQRRR).

AMINO ACID SEQUENCE

MYNMMETELK PPGPQQTSGG GGGNSTAAAA GGNQKNPDR VKRPMNAFMV WSRGQRRKMA QENPKMHNSE ISKRLGAEWK LLSETEKRPF IDEAKRLRAL HMKEHPDYKY RPRRKTTLK KDKYTLPGG LLAPGGNSMA SGVGVGAGLG AGVNQRMSY AHMNGWSNGS YSMMQDQLGY PQHPGLNAHG AAQMCPMHRY DVLSALQYNM TSSQTYMNGS PTYSMSYSQQ GTPGMALGSM GSVVKSEASS SPPVVTSSSH SRAPCQAGDL RDMISMVLPG AEVPEPAAPS RLHMSQHYQS GPVPGTAING TLPLSHMGY GRKKRRQRRR

SOURCE

E.coli

APPLICATIONS

Bioassay

PURITY

95 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

BIOACTIVITY

Data not available at this time.

RESEARCH AREAS

Immune System, Stem Cells & Differentiation

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Knaupp AS, Buckberry S, Pflueger J, Lim SM, Ford E, Larcombe MR, Rossello FJ, de Mendoza A, Alaei S, Firas J, Holmes ML, Nair SS, Clark SJ, Nefzger CM, Lister R, Polo JM. Cell Stem Cell. 2017 Dec 7;21(6):834-845.e6. doi: 10.1016/j.stem.2017.11.007. Li D, Liu J, Yang X, Zhou C, Guo J, Wu C, Qin Y, Guo L, He J, Yu S, Liu H, Wang X, Wu F, Kuang J, Hutchins AP, Chen J, Pei D. Cell Stem Cell. 2017 Dec 7;21(6):819-833.e6. doi: 10.1016/j.stem.2017.10.012.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

For Research Use Only.

Not for use in diagnostic or therapeutic procedures. Not for resale. Not for distribution without written consent. Tonbo Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Tonbo Biosciences, Tonbo Biosciences Logo and all other trademarks are the property of Tonbo Biotechnologies Corporation. © 2013 Tonbo Biosciences.