

TECHNICAL DATA SHEET

Recombinant Human Sox2 (Carrier-Free)

Catalog Number: 21-9057

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human Sox2 (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. Sox2 acts as a transcriptional activator after forming a ternary complex with Oct3/4 and a conserved non-coding DNA sequence (CNS1) located approximately 2 kb upstream of the RAX promoter.

MOLECULAR MASS

Recombinant Human Sox2 is a 34.3 kDa protein containing 317 amino acid residues.

AMINO ACID SEQUENCE

MYNMMETELK PPGPQQTSGG GGGNSTAAAA GGNQKNSPDR VKRPMNAFMV WSRGQRRKMA QENPKMHNSE ISKRLGAEWK LLESETEKRPF
 IDEAKRLRAL HMKEHPDYKY RPRRKTTLML KKDKYTLPGG LLAPGGNSMA SGVGVGAGLG AGVNQRMSY AHMNGWSNGS YSMMQDQLGY
 PQHPGLNAHG AAQMMPMHRY DVSALQYNSM TSSQTYMNGS PTYSMSYSQQ GTPGMALGSM GSVVKSEASS SPPVVTSSSH SRAPCQAGDL
 RDMISMYLPG AEVPEPAAPS RLHMSQHYQS GPVPGTAING TLPLSHM

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.

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