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Recombinant Human Sox2

Catalog # PBG10419

Specification

Recombinant Human Sox2 - Product Information

Recombinant Human Sox2 - Additional Information

Description
Sox2, also known as sex determining region Y (SRY)-box 2, 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 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. The introduction of Sox2, Oct4, Myc, and Klf4, into human dermal fibroblasts isolated from a skin biopsy of a healthy research fellow was sufficient to confer a pluripotent state upon the fibroblast genome. The reprogrammed cells thus obtained resemble ESC in morphology, gene expression, and in the capacity to form teratomas in immune-deficient mice. Recombinant human Sox2 is a 34.3 kDa protein containing 317 amino-acid residues.

BiologicalActivity
Data Not Available.

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

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

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

Storage
-20°C

Precautions
Recombinant Human Sox2 is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human Sox2 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Recombinant Human Sox2 - Images