

## 32-20410: Recombinant Human Sox2(Discontinued)

**Alternative Name :** Sex determining Region Y (CRY)-box 2

### Description

**Source:** **E.coli** 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. 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 their capacity to form teratomas in immune-deficient mice. Recombinant Human Sox2 is a 34.3 kDa protein containing 317 amino acid residues.

### Product Info

**Amount :** 5 µg / 25 µg

**Purification :** Purity: >= 95% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** MYNMMETELK PPGPQQTSGG GGGNSTAAAA GGNQKNSPDR VKRPMNAFMV WSRGQRRKMA  
QENPKMHNSE ISKRLGAEWK LLSETEKRPF IDEAKRLRAL HMKEHPDYKY RPRRKTCTLM KKDKYTLPGG  
LLAPGGNSMA SGVGVGAGLG AGVNQRMSY AHMNGWSNGS YSMMQDQLGY PQHPGLNAHG  
AAQMOPMHRV DVSALQYNSM TSSQTYMNGS PTYSMSYSQQ GTPGMALGSM GSVVKSEASS  
SPPVVTSSSH SRAPCQAGDL RDMISMYLPG AEVPEPAAPS RLHMSQHYQS GPVPGTAING TLPLSHM