

PRODUCT DATA SHEET



Complex Biotech Co., Ltd

SOX2 Recombinant Protein

Catalog: BCP3553

Host: E.coli

Tag: His-tag

BackGround:

Embryonic stem cells (ESC) derived from the inner cell mass of the blastocyst are unique in their pluripotent capacity and potential for self-renewal. Research studies demonstrate that a set of transcription factors that includes Oct-4, Sox2, and Nanog forms a transcriptional network that maintains cells in a pluripotent state. Chromatin immunoprecipitation experiments show that Sox2 and Oct-4 bind to thousands of gene regulatory sites, many of which regulate cell pluripotency and early embryonic development. siRNA knockdown of either Sox2 or Oct-4 results in loss of pluripotency. Induced overexpression of Oct-4 and Sox2, along with additional transcription factors Klf4 and c-Myc, can reprogram both mouse and human somatic cells to a pluripotent state. Additional evidence demonstrates that Sox2 is also present in adult multipotent progenitors that give rise to some adult epithelial tissues, including several glands, the glandular stomach, testes, and cervix. Sox2 is thought to regulate target gene expression important for survival and regeneration of these tissues.

Product:

0.5M Urea, PH7.4

Molecular Weight:

~35kDa

Swiss-Prot:

P48431

Purification&Purity:

Transferred into competent cells and the supernatant was purified by NI column affinity chromatography and the purity is > 85% (by SDS-PAGE).

Restriction Sites:

NdeI-XhoI

Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

Expression Vector:

pet-22b(+)

DATA:

Note:

For research use only, not for use in diagnostic procedure.