

PRODUCT DATA SHEET

Bioworld Technology,Inc.

Oct-3/4 (K222) polyclonal antibody

Catalog: BS1262 Host: Rabbit Reactivity: Human, Mouse, Rat

BackGround:

POU5F1 (POU domain, class 5, transcription factor 1), also known as octamer-binding transcription factor-3 (Oct-3, OTF3), octamer-binding transcription factor-4 (Oct-4, Otf-4) and Oct-3/4, modulates embryonic stem (ES) cell populations by influencing lineage commitment. Oct-3/4 sustains stem-cell self-renewal and differentiation pathways. Transcription factors containing the POU homeodomain regulate tissue-specific gene expression in lymphoid and pituitary differentiation and in early mammalian development. Oct-3/4 is capable of inducing rapid proliferation and tumorigenic properties of ES cells through activation of the UTF1 gene. In humans, two Oct-3/4 isoforms contribute to influencing the undifferentiated phenotype of ES cells. Oct-3/4 pseudogenes localizing to human chromosomes 10 and 8 are reported to be transcribed in certain cancer cell lines and tissues.

Product:

1 mg/ml in Phosphate buffered saline (PBS) with 0.05% sodium azide, approx. pH 7.2.

Molecular Weight:

~ 39 kDa

Swiss-Prot:

Q01860

Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

Applications:

WB: 1:500~1:1000 IHC: 1:50~1:200

Storage&Stability:

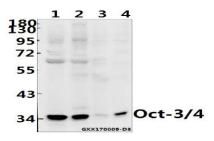
Store at 4 ${\mathbb C}$ short term. Aliquot and store at -20 ${\mathbb C}$ long

term. Avoid freeze-thaw cycles.

Specificity:

OCT3/4 (K222) polyclonal antibody detects endogenous levels of POU domain, class 5, transcription factor 1 protein.

DATA:



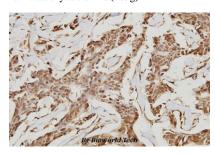
Western blot (WB) analysis of Oct-3/4 (K222) pAb at 1:500 dilution

Lane1:HEK293T whole cell lysate(40ug)

Lane2:L02 whole cell lysate(40ug)

Lane3:The Brain tissue lysate of Mouse(40ug)

Lane4:The Brain tissue lysate of Rat(40ug)



Immunohistochemistry (IHC) analyzes of Oct-3/4 (K222) pAb in paraffin-embedded human breast carcinoma tissue at 1:100.

Note:

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

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