

OCT4 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51441

Product Information

Application WB, IHC-P Primary Accession Q01860

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW38571

Additional Information

Gene ID 5460

Other Names POU domain, class 5, transcription factor 1, Octamer-binding protein 3, Oct-3,

Octamer-binding protein 4, Oct-4, Octamer-binding transcription factor 3,

OTF-3, POU5F1, OCT3, OCT4, OTF3

Dilution WB~~1:1000 IHC-P~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name POU5F1

Synonyms OCT3, OCT4, OTF3

Function Transcription factor that binds to the octamer motif (5'- ATTTGCAT-3'). Forms

a trimeric complex with SOX2 or SOX15 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206. Critical for early embryogenesis and for embryonic stem

cell pluripotency.

Cellular Location Cytoplasm. Nucleus. Note=Expressed in a diffuse and slightly punctuate

pattern. Colocalizes with MAPK8 and MAPK9 in the nucleus.

{ECO:0000250|UniProtKB:P20263, ECO:0000269|PubMed:18191611, ECO:0000269|PubMed:19274063, ECO:0000269|PubMed:23024368}

Tissue Location Expressed in developing brain. Highest levels found in specific cell layers of

the cortex, the olfactory bulb, the hippocampus and the cerebellum. Low

levels of expression in adult tissues.

Background

Transcription factor that binds to the octamer motif (5'-ATTTGCAT-3'). Forms a trimeric complex with SOX2 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206. Critical for early embryogenesis and for embryonic stem cell pluripotency.

References

Takeda J., et al. Nucleic Acids Res. 20:4613-4620(1992). Stuart P.E., et al. Tissue Antigens 76:387-397(2010). Shiina T., et al. Genetics 173:1555-1570(2006). Shiina S., et al. Submitted (SEP-1999) to the EMBL/GenBank/DDBJ databases. Mungall A.J., et al. Nature 425:805-811(2003).

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