

OCT4 polyclonal antibody - Classic

Purified rabbit polyclonal Antibody

Catalog # ADN10283

Specification

OCT4 polyclonal antibody - Classic - Product Information

Application	CHIP, E, WB
Primary Accession	Q01860
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	38571

OCT4 polyclonal antibody - Classic - 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

Precautions

OCT4 polyclonal antibody - Classic is for research use only and not for use in diagnostic or therapeutic procedures.

OCT4 polyclonal antibody - Classic - Protein Information

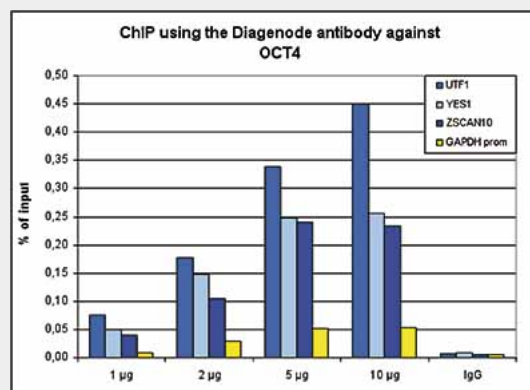
Name POU5F1

Function

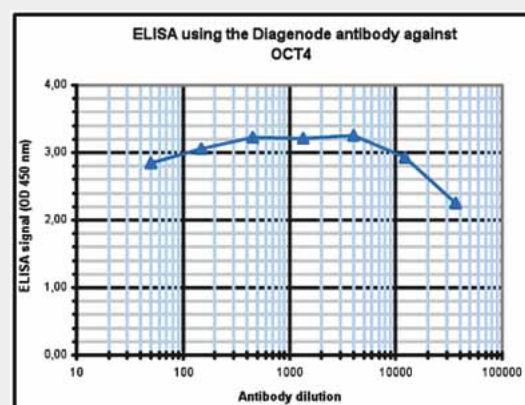
Transcription factor that binds to the octamer motif (5'- ATTTGCAT-3'). Forms a trimeric complex with SOX2 or SOX15 on DNA and controls the expression of a number of genes involved in embryonic development such as YES1, FGF4, UTF1 and ZFP206. Critical for early embryogenesis and for embryonic stem cell pluripotency.

Cellular Location

Cytoplasm. Nucleus. Note=Expressed in a diffuse and slightly punctuate pattern. Colocalizes with MAPK8 and MAPK9 in the



ChIP assays were performed using E14Tg2a mouse embryonic stem cells, the Diagenode antibody against OCT4 (Cat. No. ADN10283) and optimized PCR primer sets for qPCR. ChIP was performed with the "iDeal ChIP-seq" kit (Cat. No. C01010055), using sheared chromatin from 4 million cells. A titration of the antibody consisting of 1, 2, 5 and 10 µg per ChIP experiment was analysed. IgG (2 µg/IP) was used as negative IP control. Quantitative PCR was performed with primers for known OCT4 targets UTF1, YES1 and ZSCAN10, used as positive control targets, and for the promoter of the GAPDH gene, used as a negative control. Figure 1 shows the recovery, expressed as a % of input (the relative amount of immunoprecipitated DNA compared to input DNA after qPCR analysis).



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

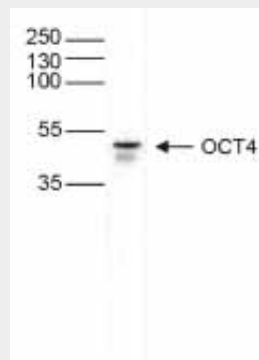
Tissue Location

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.

OCT4 polyclonal antibody - Classic - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



Nuclear extracts (15 µg) from human embryonic stem cells were analysed by Western blot using the Diagenode antibody against OCT4 (Cat. No. ADN10283) diluted 1:1,000 in TBS- Tween containing 5% skimmed milk. The position of the protein of interest is indicated on the right; the marker (in kDa) is shown on the left.