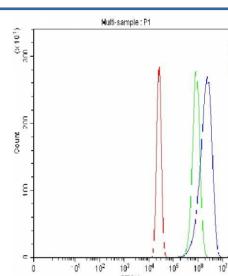


Oct4 Antibody / POU5F1 (RQ5528)

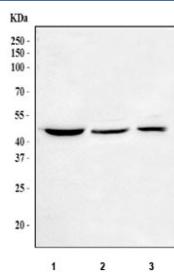
Catalog No.	Formulation	Size
RQ5528	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q01860
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This Oct4 antibody is available for research use only.



Flow cytometry testing of fixed and permeabilized human A431 cells with Oct4 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Oct4 antibody.



Western blot testing of 1) human HeLa, 2) mouse brain and 3) rat brain tissue lysate with Oct4 antibody. Predicted molecular weight ~38/30kDa (isoform A/B), commonly observed at 38-45 kDa.

Description

Oct-4 (octamer-binding transcription factor 4), also known as POU5F1 (POU domain, class 5, transcription factor 1), is a protein that in humans is encoded by the POU5F1 gene. It is mapped to 6p21.33. This gene encodes a transcription factor containing a POU homeodomain that plays a key role in embryonic development and stem cell pluripotency. Aberrant expression of this gene in adult tissues is associated with tumorigenesis. This gene can participate in a translocation with the Ewing's sarcoma gene on chromosome 21, which also leads to tumor formation. Alternative splicing, as well as usage of alternative AUG and non-AUG translation initiation codons, results in multiple isoforms. One of the AUG start codons is polymorphic in human populations. Related pseudogenes have been identified on chromosomes 1, 3, 8, 10, and 12.

Application Notes

Optimal dilution of the Oct4 antibody should be determined by the researcher.

Immunogen

A human recombinant protein (amino acids E26-A300) was used as the immunogen for the Oct4 antibody.

Storage

After reconstitution, the Oct4 antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.