

Product Datasheet

OCT4 Antibody NB100-2379SS

Unit Size: 0.025 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

www.novusbio.com



support@novusbio.com

Publications: 4

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NB100-2379

Updated 6/15/2014 v.20.1

NB100-2379SS

OCT4 Antibody

Product Information	
Unit Size	0.025 ml
Concentration	0.85 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Purity	Immunogen affinity purified
Buffer	Tris-glycine, 150 mM NaCl
Target Molecular Weight	40 kDa

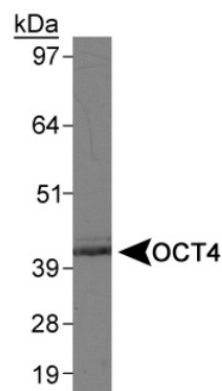
Product Description	
Host	Rabbit
Gene ID	5460
Gene Symbol	POU5F1
Species	Human, Mouse, Rat, Primate
Species Reactivity	Human, monkey, rat, mouse. Immunogen has 93% homology to cow, feline and pig. Customer feedback suggests that this antibody does not give good results in IHC-P on feline tissues.
Marker	Embryonic Stem Cell Marker
Immunogen	A synthetic peptide made to an internal portion of the human OCT4 protein (between residues 100-200) [UniProt# Q01860]

Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/Immunofluorescence
Recommended Dilutions	Flow Cytometry 1:50-1:200, Immunocytochemistry/Immunofluorescence 1:50-1:200, Western Blot 2ug/ml
Application Notes	This OCT4 antibody is useful for Immunocytochemistry/Immunofluorescence, Flow Cytometry, and Western blot where a band is seen at ~40 kDa.



Images

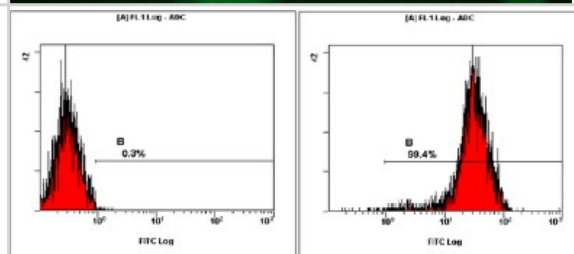
Western Blot: OCT4 Antibody [NB100-2379] - Detection of OCT4 in mouse brain lysate.



Immunocytochemistry/Immunofluorescence: OCT4 Antibody [NB100-2379] - OCT4 staining in NTERA-2 cells detected with a Dylight 488 labeled secondary antibody.



Flow Cytometry: OCT4 Antibody [NB100-2379] - Staining of NTERA-2 cells using NB100-2379 at a 1:50 dilution detected using Dylight-488 conjugated goat anti-rabbit secondary antibody.



Publications

Liu JW, Hsu YC, Kao CY et al. LIF-induced Stat3 signaling suppresses FGF1-induced Erk1/2 activation to inhibit the downstream differentiation in mouse embryonic stem cells *Stem Cells Dev* 2012 Dec 4 [PMID: 23205673]

Cho YM, Kim YS, Kang MJ et al. Long-term recovery of irradiated prostate cancer increases cancer stem cells *Prostate* 2012 Dec 1 [PMID: 22513891] (WB, Human)

Ruggeri RR, Watanabe Y, Meirelles F et al. The use of parthenotegenetic and IVF bovine blastocysts as a model for the creation of human embryonic stem cells under defined conditions *J Assist Reprod Genet* 2012 Sep 29 [PMID: 23054358] (ICC/IF, Bovine)

Yenamandra SP, Darekar SD, Kashuba V et al. Stem cell gene expression in MRPS18-2-immortalized rat embryonic fibroblasts. *Cell Death Dis* 2012 Jan [PMID: 22258410] (WB, Rat)

Procedures

Protocol specific for OCT4 Antibody (NB100-2379)

Western Blot Protocol

1. Perform SDS-PAGE (4-12%) on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. Rinse membrane with dH₂O and then stain the blot using ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
4. Rinse the blot in TBS for approximately 5 minutes.
5. Block the membrane using 5% non-fat dry milk + 1% BSA in TBS for 1 hour at room temperature (RT).
6. Rinse the membrane in dH₂O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
7. Dilute the rabbit anti-OCT4 primary antibody (NB 100-2379) in blocking buffer and incubate 1 hour at RT.
8. Rinse the membrane in dH₂O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
9. Apply the diluted rabbit-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions (we used BioFX Super Plus ECL).

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.





Novus Biologicals USA

8100 Southpark Way, A-8
Littleton, CO 80120
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
novus@novusbio.com

Novus Biologicals Canada

461 North Service Road West, Unit B37
Oakville, ON L6M 2V5
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada@novusbio.com

Novus Biologicals Europe

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: technical@novusbio.com
Orders: orders@novusbio.com
General: novus@novusbio.com

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our guarantee, please visit www.novusbio.com/guarantee.

