

# Product Datasheet

## OCT4 Antibody (OTI9B7)

### NBP1-47923

Unit Size: 0.1 ml

Store at -20C. Avoid freeze-thaw cycles.

[www.novusbio.com](http://www.novusbio.com)



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#### Publications: 6

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**NBP1-47923**

OCT4 Antibody (OTI9B7)

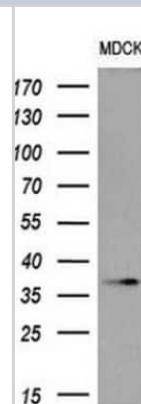
Product Information	
Unit Size	0.1 ml
Concentration	0.25 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	OTI9B7
Preservative	0.02% Sodium Azide
Isotype	IgG1
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.3), 1.0% BSA and 50% Glycerol
Target Molecular Weight	38.4 kDa

Product Description	
Description	Novus Biologicals Mouse OCT4 Antibody (OTI9B7) (NBP1-47923) is a monoclonal antibody validated for use in IHC, WB and ICC/IF. Anti-OCT4 Antibody: Cited in 6 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	5460
Gene Symbol	POU5F1
Species	Human
Marker	Embryonic Stem Cell Marker
Specificity/Sensitivity	This antibody is specific for Homo sapiens POU class 5 homeobox 1 (POU5F1), transcript variant 1.
Immunogen	Full length human recombinant protein of human POU5F1 (NP_002692) produced in E.coli.

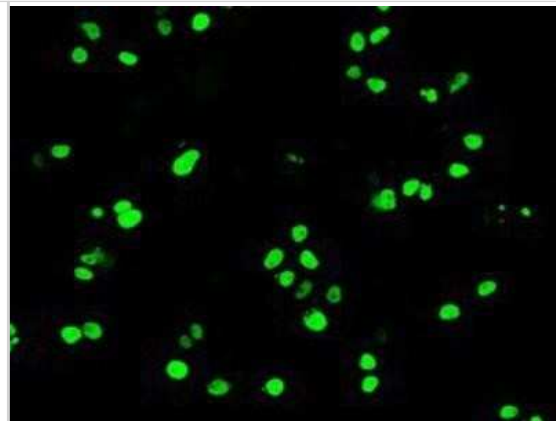
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:5000, Immunohistochemistry 1:50, Immunocytochemistry/Immunofluorescence 1:100, Immunohistochemistry-Paraffin 1:50

**Images**

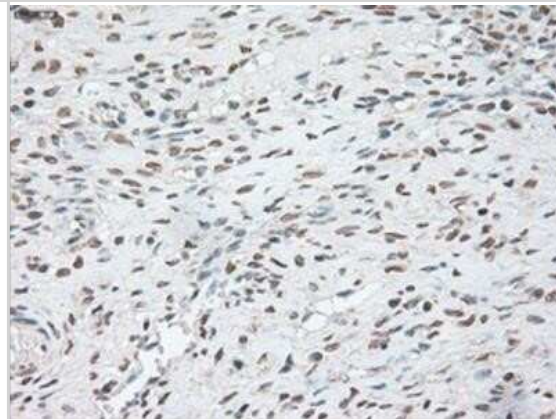
Western Blot: OCT4 Antibody (OTI9B7) [NBP1-47923] - HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY OCT4 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-OCT4



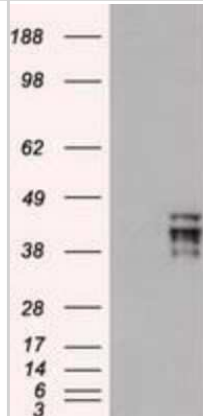
Immunocytochemistry/Immunofluorescence: OCT4 Antibody (OTI9B7) [NBP1-47923] - Staining of COS7 cells transiently transfected by pCMV6-ENTRY 41186.



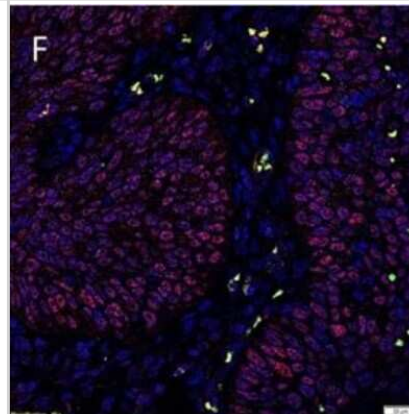
Immunohistochemistry-Paraffin: OCT4 Antibody (OTI9B7) [NBP1-47923] - Staining of paraffin-embedded Human Ovary tissue using anti-41186 mouse monoclonal antibody.



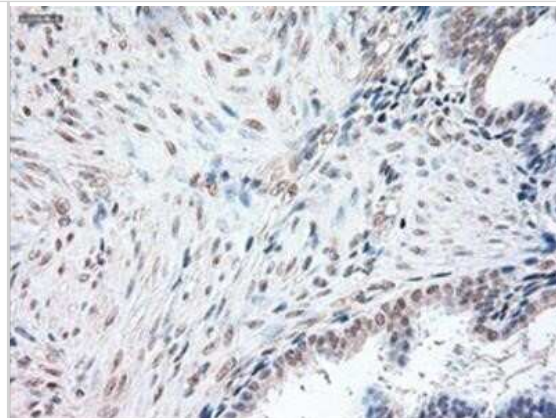
Western Blot: OCT4 Antibody (OTI9B7) [NBP1-47923] - HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY OCT4 (Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-OCT4.



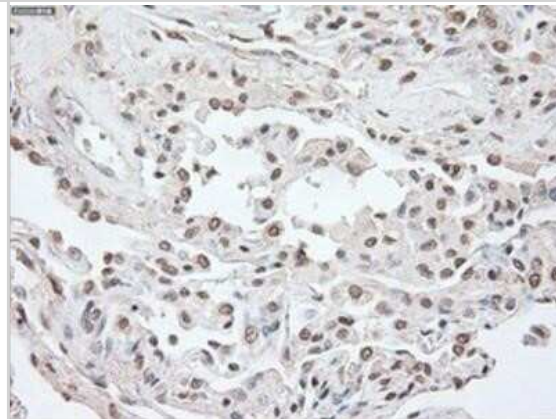
Immunocytochemistry/Immunofluorescence: OCT4 Antibody (OTI9B7) [NBP1-47923] - Representative IF IHC-stained sections of MDBMSCC. Expression of both SOX2 (red) and OCT4 (green), appearing as orange, was seen on cells within the tumor nests and the stroma, and the endothelium of the microvessels within the stroma. Scale bars: 20 um. Image collected and cropped by CiteAb from the following publication (<https://journal.frontiersin.org/article/10.3389/fsurg.2016.00046>), licensed under a CC-BY license.



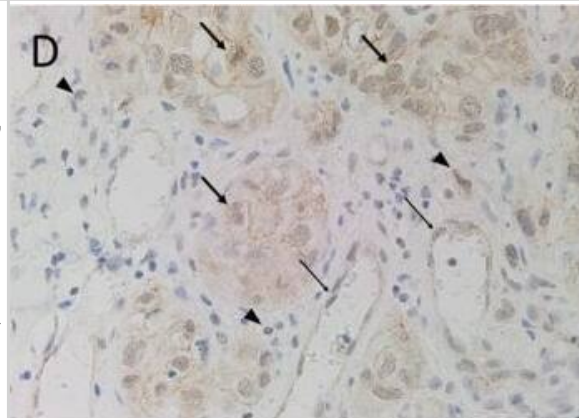
Immunohistochemistry-Paraffin: OCT4 Antibody (OTI9B7) [NBP1-47923]  
- Staining of paraffin-embedded Human endometrium tissue using anti-41186 mouse monoclonal antibody.



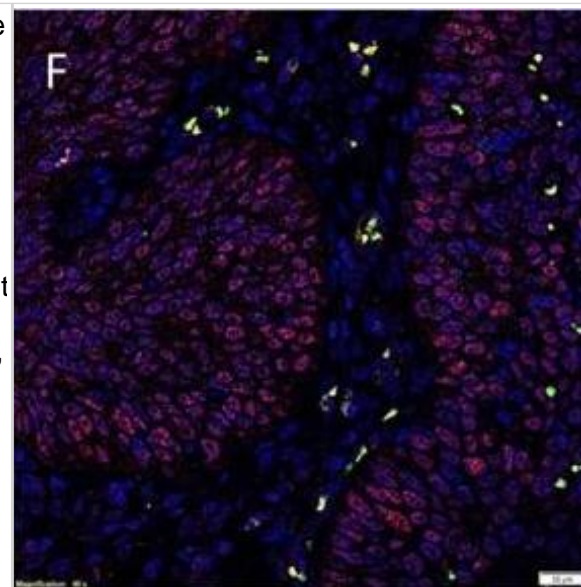
Immunohistochemistry-Paraffin: OCT4 Antibody (OTI9B7) [NBP1-47923]  
- Staining of paraffin-embedded Human lung tissue using anti-41186 mouse monoclonal antibody.



Immunohistochemistry: OCT4 Antibody (OTI9B7) [NBP1-47923] - Representative DAB IHC-stained sections of MDBMSCC demonstrating nuclear expression of EMA of cells within the tumor nests [(A), brown]. Expression of SOX2 was seen in cells within the tumor nests [(B), brown, thick arrows] & the stroma [(B), brown, arrowheads], & on the endothelium of the microvessels within the stroma [(B), brown, thin arrows]. Expression of SALL4 was limited to cells within the tumor nests [(C), brown, thick arrows] & the endothelium of the microvessels [(C), brown, thin arrows]. OCT4 was also expressed in cells within tumor nests [(D), brown, thick arrows] & the stroma [(D), brown, arrowheads], & the endothelium of the microvessels within the stroma [(D), brown, thin arrows]. Expression of pSTAT3 was detected on cells within the tumor nests [(E), brown, thick arrows] & the stroma [(E), brown, arrowheads], & the endothelium of the microvessels within the stroma [(E), brown, thin arrows]. NANOG was also seen in cells within the tumor nests [(F), brown, thick arrows] & the stroma [(F), brown, arrowheads], & the endothelium of the microvessels within the stroma [(F), brown, thin arrows]. CD44 expression was seen as membranous staining of the tumor nest cells [(G), brown]. Original magnification: 400 $\times$ . Image collected & cropped by CiteAb from the following publication (<http://journal.frontiersin.org/Article/10.3389/fsurg.2016.00046/abstract>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Representative IF IHC-stained sections of MDBMSCC demonstrating the expression of pSTAT3 [(A), red] and EMA [(A), green] by cells within the tumor nests. There was a CSC subpopulation remonstrating nuclear co-expression of STAT3 [(B), red] and CD34 [(B), green], appearing as orange, on the endothelium of the microvessels within the stroma; and another subpopulation staining only positively for pSTAT3 within the stroma [(B), red]. Nuclear expression of NANOG [(C), red] was demonstrated on the endothelium of the microvessels which expressed CD34 [(C), green] within stroma. The NANOG+ cells [(C), red] that do not express CD34 were seen within the tumor nests and the stroma. SOX2 [(D), red] was also expressed by cells within tumor nests and the stroma, and the endothelium of the microvessels expressing CD34 [(D), green]. Nuclear expression of both SOX2 [(E), red] and SALL4 [(E), green], appearing as orange, was seen on the cells within the tumor nests and the stroma. Expression of both SOX2 [(F), red] and OCT4 [(F), green], appearing as orange, was seen on cells within the tumor nests and the stroma, and the endothelium of the microvessels within the stroma. pSTAT3 [(G), red] and membranous staining CD44 [(G), green] were co-expressed by cells within the tumor nests. Scale bars: 20  $\mu$ m. Image collected and cropped by CiteAb from the following open publication (<https://pubmed.ncbi.nlm.nih.gov/27532037>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Filidou E, Kandilogiannakis L, Tarapatzi G et al. A Simplified and Effective Approach for the Isolation of Small Pluripotent Stem Cells Derived from Human Peripheral Blood Biomedicines 2023-03-05 [PMID: 36979766] (Immunocytochemistry/ Immunofluorescence, Human)

Grande G, Milardi D, Martini M et al. Protein Expression of PTTG-1, OCT-4, and KLF-4 in Seminoma: A Pilot Study Front Endocrinol (Lausanne) 2019-09-11 [PMID: 31572301] (IF/IHC, IHC-P, Human)

Tan K, Brasch HD, van Schaijik B et al. Expression and Localization of Cathepsins B, D, and G in Dupuytren's Disease. Plast Reconstr Surg Glob Open. [PMID: 29616179] (IF/IHC, Human)

Koh SP, Wickremesekera AC, Brasch HD et al. Expression of Cathepsins B, D, and G in Isocitrate Dehydrogenase-Wildtype Glioblastoma. Front Surg. 2017-06-14 [PMID: 28611989] (IF/IHC, Human)

Koh SP, On N, Brasch HD et al. Embryonic Stem Cell-like Population in Dupuytren's Disease. Plast Reconstr Surg Glob Open. 2016-11-01 [PMID: 27975007] (IF/IHC, Human)

Yu HH, Featherston T, Tan ST et al. Characterization of Cancer Stem Cells in Moderately Differentiated Buccal Mucosal Squamous Cell Carcinoma. Front Surg. 2016-08-17 [PMID: 27532037] (IF/IHC, Human)



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### Products Related to NBP1-47923

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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### 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.

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