# **Product Datasheet**

## SSEA-1 Antibody NB100-1831SS

Unit Size: 0.025 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**Publications: 4** 

Protocols, Publications, Related Products, Reviews, Research Tools and Images at: www.novusbio.com/NB100-1831

Updated 6/15/2014 v.20.1

## NB100-1831SS

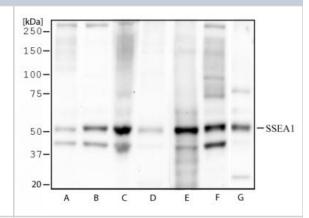
SSEA-1 Antibody (MC-480)

| SSLA-1 Antibody (MC-400)           |  |
|------------------------------------|--|
| <b>Product Information</b>         |  |
| Unit Size                          | 0.025 ml   |
| Concentration                      | 1 mg/ml  |
| Storage                            | Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.   |
| Clonality                          | Monoclonal   |
| Clone                              | MC-480   |
| Preservative                       | 0.05% Sodium Azide   |
| Isotype                            | IgM  |
| Purity                             | IgM purified   |
| Buffer                             | Tris-glycine, 150 mM NaCl  |
| <b>Product Description</b>         |  |
| Host                               | Mouse  |
| Gene ID                            | 2526   |
| Gene Symbol                        | FUT4   |
| Species                            | Human, Mouse, Rat  |
| Species Reactivity                 | Human and mouse. This antibody recognizes SSEA1 in mouse EC and ES cells but not human, but SSEA1 is expressed by some human differentiated cell types (ie: trophoblasts). Reactivity with Rat is reported by Kim et al. 2007 (PMID 17548530). |
| Marker                             | Embryonic Stem Cell Marker   |
| Immunogen                          | F9 tetracarcinoma stem cells (X-irradiated).   |
| <b>Product Application Details</b> |  |
| Applications                       | Western Blot, Simple Western, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin   |
| Recommended Dilutions              | Flow Cytometry 1:50-1:200, Immunocytochemistry/Immunofluorescence 1:50-1:200, Immunohistochemistry 1:50-1:200, Immunohistochemistry-Frozen 1:50-1:200, Immunohistochemistry-Paraffin 1:50-1:200, Western Blot 2 ug/ml, Simple Western 1:10     |
| Application Notes                  | This SSEA1 antibody is useful for Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry-Frozen and Paraffin.In Simple Western only 10-15 uL of the recommended dilution is used per data point.                         |

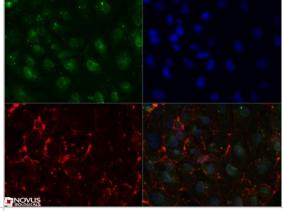


#### **Images**

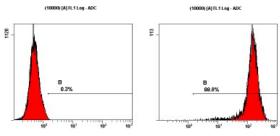
Western Blot: SSEA1 Antibody (MC-480) [NB100-1831] - Western blot analysis of Ntera2 cell lysate (A), HUVEC cell lysate (B), Jurkat cell lysate (C), human stomach tissue (D), human brain tissue (E), MEF cell lysate (F), and mouse brain tissue (G) using SSEA 1 antibody (NB100-1831) at 2 ug/ml.



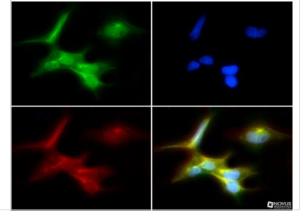
Immunocytochemistry/Immunofluorescence: SSEA1 Antibody (MC-480) [NB100-1831] - SSEA1 antibody (0.1ug/ml) was tested in Ntera2 cells with Dylight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and Dylight 550 (red). Image objective 40x.



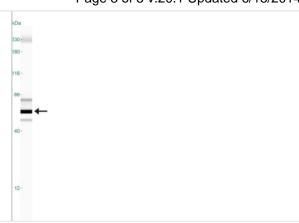
Flow Cytometry: SSEA1 Antibody (MC-480) [NB100-1831] - Staining of NTERA-2 cells using NB100-1831 at a 1:50 dilution detected using Dylight-488 conjugated goat anti-mouse IgM secondary antibody.



Immunocytochemistry/Immunofluorescence: SSEA1 Antibody (MC-480) [NB100-1831] - SSEA1 antibody was tested in Ntera-2 cells with FITC (green). Nuclei and alpha-tubulin were counterstained with Dapi (blue) and Dylight 550 (red).



Simple Western: SSEA-1 Antibody (MC-480) [NB100-1831] - Simple Western lane view shows a specific band for SSEA1 in 0.5 mg/ml of Human Brain lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



#### **Publications**

Martin, M et al. Specific knockdown of Oct4 and beta2-microglobulin expression by RNA interference in human embryonic stem cells and embryonic carcinoma cells. Stem Cells;22(5):659-68. 2004 [PMID: 15342930] (FLOW, Human)

Henderson, JK et al. Preimplantation human embryos and embryonic stem cells show comparable expression of stage-specific embryonic antigens. Stem Cells;20(4):329-37. 2002 [PMID: 12110702]

Kanatsu-Shinohara M, Ogonuki N, Inoue K, Miki H, Ogura A, Toyokuni S, Shinohara T. Long-term proliferation in culture and germline transmission of mouse male germline stem cells. Biol Reprod;69(2):612-6. 2003 Aug. [PMID: 12700182] (FLOW, Mouse)

Reubinoff BE, Pera MF, Fong CY, Trounson A, Bongso A. Embryonic stem cell lines from human blastocysts: somatic differentiation in vitro. Nat Biotechnol;18(4):399-404. 2000 Apr. [PMID: 10748519] (ICC/IF, Human)



#### **Procedures**

#### **Protocol Specific for NB100-1831 (NB100-1831)**

Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

- 1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
- 2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
- 3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
- 4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
- 5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
- 6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
- 7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
- 8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,0000 and incubate for 10 minutes. Wash a third time for 10 minutes.
- 9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

\*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.





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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.

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

