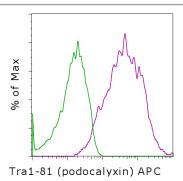


An Affymetrix Company

Anti-Human TRA-1-81 (Podocalyxin) APC

Catalog Number: 17-8883

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of the 2102Ep human embryonal carcinoma cell line with staining buffer (autofluorescence) (green histogram) or Anti-Human TRA-1-81 APC (purple histogram). Total viable cells were used for analysis.

Product Information

Contents: Anti-Human TRA-1-81

(Podocalyxin) APC

REF Catalog Number: 17-8883

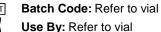
Clone: TRA-1-81

Concentration: 5 uL (0.25 ug)/test

Host/Isotype: Mouse IgM



Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer Temperature Limitation: Store at 2-8°C. DO NOT FREEZE. LIGHT-SENSITIVE MATERIAL.





Description

The TRA-1-81 antibody recognizes a protein expressed on undifferentiated human embryonic stem cells (ES), embyronal carcinoma cells (EC), and embryonic germ cells (EG). Like other stem cell specific markers, the epitope recognized by the TRA-1-81 antibody is lost upon cell differentiation. The TRA-1-81 epitope is resistant to neuraminidase digestion, unlike the epitope recognized by the related TRA-1-60 antibody. The TRA-1-81 antibody is known to specifically recognize a carbohydrate epitope on a keratan sulfated glycoprotein recently identified as podocalyxin, a member of the CD34-related family of sialomucins. Podocalyxin is a transmembrane glycoprotein originally identified on epithelial glomerular cells known as podocytes, and the protein has also been implicated in the development of aggressiveness in a variety of cancers, including breast and prostate cancer.

Applications Reported

This TRA-1-81 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This TRA-1-81 antibody has been pre-titrated and tested by flow cytometric analysis of 2102Ep human embryonal carcinoma cells. This can be used at 5 μ L (0.25 μ g) per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

References

Schopperle WM, DeWolf WC. The TRA-1-60 and TRA-1-81 human pluripotent stem cell markers are expressed on podocalyxin in embryonal carcinoma. Stem Cells. 2007 Mar;25(3):723-30. (TRA-1-81, WB, PubMed)

Xu C, Inokuma MS, Denham J, Golds K, Kundu P, Gold JD, Carpenter MK. Feeder-free growth of undifferentiated human embryonic stem cells. Nat Biotechnol. 2001 Oct;19(10):971-4. (PubMed)

Badcock G, Pigott C, Goepel J, Andrews PW. The human embryonal carcinoma marker antigen TRA-1-60 is a sialylated keratan sulfate proteoglycan. Cancer Res. 1999 Sep 15;59(18):4715-9. (**TRA-1-81**, WB, PubMed)



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Andrews PW, Banting G, Damjanov I, Arnaud D, Avner P. Three monoclonal antibodies defining distinct differentiation antigens associated with different high molecular weight polypeptides on the surface of human embryonal carcinoma cells. Hybridoma. 1984 Winter;3(4):347-61. (PubMed)

Related Products

12-8833 Anti-Human/Mouse SSEA-3 PE (eBioMC-631 (MC-631)) 17-4321 Rat IgG2a K Isotype Control APC (eBR2a)