Antibodies	Anti-Human TRA-1-60 Antibody, Clone TRA-1-60R, Biotin	STENCELL ^M
	Mouse monoclonal IgM antibody against human, rhesus, rabbit	Scientists Helping Scientists™ WWW.STEMCELL.COM
	TRA-1-60 (podocalyxin), biotin-conjugated	TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713
		INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM
Catalog #60064BT	100 μg 0.5 mg/mL	FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Product Description

The TRA-1-60R antibody reacts with TRA-1-60, a > 200 kDa pluripotent stem cell-specific protein expressed on the surface of undifferentiated human embryonic stem (ES) and induced pluripotent stem (iPS) cells, embryonal carcinoma (EC) cells, and embryonic germ (EG) cells, as well as rhesus monkey ES cell lines. A soluble form of TRA-1-60 has been detected in serum of patients with embryonal carcinoma. The epitope, which is lost upon cell differentiation, contains sialic acid, and is associated with a large-molecular-mass transmembrane protein named podocalyxin. Though sialylated, the epitope recognized by the TRA-1-60R antibody is resistant to treatment with neuraminidase.

TRA-1-60 (Podocalyxin)
Podocalyxin, TRA-1
5420
Human, Rhesus, Rabbit
Mouse
Monoclonal
TRA-1-60R
lgM, kappa
Human embryonal carcinoma cell line 2102Ep cl.2A6
Biotin

Applications

Verified:	FC	
Reported:	FC, ICC, IF, IHC, IP, WB	
Special Applications:	This antibody clone has been verified for labeling human ES and iPS cells grown in TeSR™-E8™	
	(Catalog #05990), mTeSR™1 (Catalog #85850), and TeSR™2 (Catalog #05860).	

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

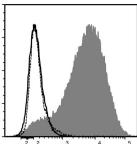
Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry, the suggested use of this antibody is \leq 0.25 µg per 1 x 10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Antibodies



Data



-10²10² 10³ 10⁴ 10⁵ TRA-1-60 Biotin/SAV APC

Flow cytometry analysis of human ES cells (filled histogram) or HT1080 fibrosarcoma cells (negative control; dashed line histogram) labeled with Anti-Human TRA-1-60 Antibody, Clone TRA-1-60R, Biotin, followed by streptavidin (SAV) APC. Labeling of human ES cells with a mouse IgM, kappa biotin isotype control antibody, followed by SAV APC is shown (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Naturen S et al. (2011) The binding specificity of the marker antibodies Tra-1-60 and Tra-1-81 reveals a novel pluripotency-associated type 1 lactosamine epitope. Glycobiology 21(9): 1125–30.

2. Miyoshi N et al. (2010) Defined factors induce reprogramming of gastrointestinal cancer cells. Proc Natl Acad Sci USA 107(1): 40-5. (IF)

3. Chan EM et al. (2009) Live cell imaging distinguishes bona fide human iPS cells from partially reprogrammed cells. Nat Biotechnol 27(11): 1033–7. 4. King FW et al. (2009) Subpopulations of human embryonic stem cells with distinct tissue-specific fates can be selected from pluripotent cultures. Stem Cells Dev 18(10): 1441–50. (FC)

5. Kuai XL et al. (2009) Differentiation of nonhuman primate embryonic stem cells along neural lineages. Differentiation 77(3): 229–38. (IF)

6. Hockemeyer D et al. (2008) A drug-inducible system for direct reprogramming of human somatic cells to pluripotency. Cell Stem Cell 3(3): 346–53.

7. Draper JS et al. (2002) Surface antigens of human embryonic stem cells: changes upon differentiation in culture. J Anat 200(3): 249–58.

8. Henderson JK et al. (2002) Preimplantation human embryos and embryonic stem cells show comparable expression of stage-specific embryonic antigens. Stem Cells 20(4): 329–37. (FC, IF)

9. Thomson JA et al. (1995) Isolation of a primate embryonic stem cell line. Proc Natl Acad Sci USA 92(17): 7844–8. (IHC)

10. Andrews PW et al. (1984) Three monoclonal antibodies defining distinct differentiation antigens associated with different high molecular weight polypeptides on the surface of human embryonal carcinoma cells. Hybridoma 3(4): 347–61.

PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2020 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and EasySep are trademarks of STEMCELL Technologies Canada Inc. E8, mTeSR, and TeSR are trademarks of WARF. Corning and Matrigel are registered trademarks of Corning Incorporated. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.