

Antibodies

Catalog #60064

Anti-Human TRA-1-60 Antibody, Clone TRA-1-60R

Mouse monoclonal IgM antibody
against human, rhesus, rabbit
TRA-1-60 (podocalyxin), unconjugated

100 µg 0.5 mg/mL



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

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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), induced pluripotent stem (iPS), embryonal carcinoma (EC), 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.

Target Antigen Name:	TRA-1-60 (Podocalyxin)
Alternative Names:	Podocalyxin, TRA-1
Gene ID:	5420
Species Reactivity:	Human, Rhesus, Rabbit
Host Species:	Mouse
Clonality:	Monoclonal
Clone:	TRA-1-60R
Isotype:	IgM, kappa
Immunogen:	Human embryonal carcinoma cell line 2102Ep cl.2A6
Conjugate:	Unconjugated

Applications

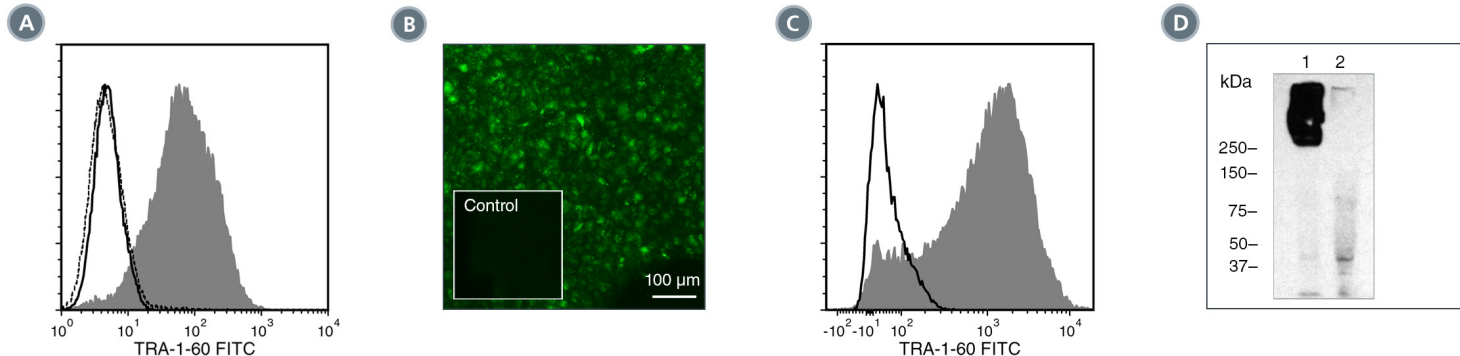
Verified:	CellSep, FC, ICC, IF, WB
Reported:	FC, ICC, IF, IP, WB
Special Applications:	This antibody clone has been verified for labeling human ES and iPS cells grown in TeSR™-E8™ (Catalog #05940), mTeSR™1 (Catalog #85850), and TeSR™2 (Catalog #05860), and for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human ES/iPS Cell TRA-1-60 Positive Selection Kit (Catalog #18166; partial blocking may be observed) and EasySep™ hESC/hiPSC SSEA-4 Positive Selection (Catalog #18165).

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:	This antibody is at > 85% purity.
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:	The suggested use of this antibody is: FC, ≤ 0.5 µg per 1 × 10 ⁶ cells in 100 µL; ICC/IF, ≤ 5 µg/mL; WB, ≤ 2 µg/mL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) 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, followed by goat anti-mouse IgG, FITC. Labeling of human ES cells with Mouse IgM, kappa Isotype Control Antibody, Clone MM-30 (Catalog #60069), followed by goat anti-mouse IgG, FITC is shown (solid line histogram).

(B) Human ES cells were cultured in mTeSRTM1 on Corning[®] Matrigel[®]-coated glass slides, then fixed and labeled with Anti-Human TRA-1-60 Antibody, Clone TRA-1-60R, followed by goat anti-mouse IgG, FITC. Inset shows cells labeled with Mouse IgM, kappa Isotype Control Antibody, Clone MM-30, followed by goat anti-mouse IgG, FITC.

(C) Flow cytometry analysis of human iPS cells labeled with Anti-Human TRA-1-60 Antibody, Clone TRA-1-60R, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138FI) (filled histogram), or Mouse IgM, kappa Isotype Control Antibody, Clone MM-30, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (solid line histogram).

(D) Western blot analysis of denatured/reduced cell lysates from human ES cells (lane 1) or HT1080 fibrosarcoma cells (negative control, lane 2) with Anti-Human TRA-1-60 Antibody, Clone TRA-1-60R.

Related Products

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

References

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