

## PE anti-human TRA-1-81 Antibody

<b>Catalog# / Size</b>	330707 / 25 tests 330708 / 100 tests
<b>Clone</b>	TRA-1-81
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Podocalyxin
<b>Isotype</b>	Mouse IgM, κ
<b>Description</b>	The TRA-1-81 antibody reacts with a 200-240 kD cell surface antigen expressed by human embryonic stem cells (ESC), embryonic germ cells (EG), and embryonal carcinoma cells. The expression of TRA-1-81 on human ESC is downregulated upon differentiation. Further studies have shown that TRA-1-81 is a neuroaminidase-resistant carbohydrate epitope expressed on podocalyxin, a member of mucin-like glycoprotein with CD34 family. Podocalyxin is a type I transmembrane sialoprotein with anti-adhesion property.

### Product Details

<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human embryonic carcinoma cell line 2102Ep cl.2A6
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunofluorescence cell staining <sup>1</sup> , immunoprecipitation <sup>1</sup> , Western blotting <sup>1,2</sup> , ELISA <sup>1</sup> , and immunohistochemistry <sup>1</sup> of acetone-fixed frozen tissue sections and formalin-fixed paraffin-embedded sections.
<b>Application References</b>	1. Andrews PW, <i>et al.</i> 1984. <i>Hybridoma</i> . 3:347. 2. Schopperle WM and Dewolf WC. 2007. <i>Stem Cells</i> . 25:723.
<b>Product Citations</b>	1. Ababneh NA, <i>et al.</i> 2020. <i>Stem Cell Research</i> . 72:77986111. <a href="#">PubMed</a> 2. Ababneh NA, <i>et al.</i> 2021. <i>Stem Cell Research</i> . 54:102358. <a href="#">PubMed</a> 3. Klaihmon P, <i>et al.</i> 2021. <i>Stem Cell Research</i> . 55:102472. <a href="#">PubMed</a> 4. Morvan MG, <i>et al.</i> 2021. <i>Proc Natl Acad Sci U S A</i> . 118:. <a href="#">PubMed</a>
<b>RRID</b>	AB_1089246 (BioLegend Cat. No. 330707) AB_1089243 (BioLegend Cat. No. 330708)

## Antigen Details

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<b>Structure</b>	Mucin-like protein, CD34 family member, 200-240 kD
<b>Distribution</b>	embryonic stem cells (ESC), embryonic germ cells (EG), embryonal carcinoma cells
<b>Function</b>	Anti-adhesion
<b>Cell Type</b>	Embryonic Stem Cells
<b>Biology Area</b>	Cell Biology, Immunology, Stem Cells
<b>Antigen References</b>	1. Andrews PW, <i>et al.</i> 1984. <i>Hybridoma</i> . 3:347. 2. Schopperle WM and Dewolf WC. 2007. <i>Stem Cells</i> . 25:723. 3. Takeda T, <i>et al.</i> 2000. <i>Mol. Biol. Cell</i> . 11:3219.
<b>Gene ID</b>	<a href="#">5420</a>

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

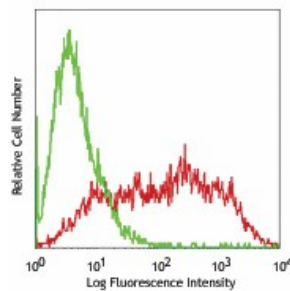
## Other Formats

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Purified anti-human TRA-1-81, Alexa Fluor® 647 anti-human TRA-1-81, PE anti-human TRA-1-81, Alexa Fluor® 488 anti-human TRA-1-81, TotalSeq™-A1039 anti-human TRA-1-81

## Product Data

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NCCIT (human teratocarcinoma cell line)  
stained with TRA-1-81 PE

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