

PE anti-human TRA-1-60-R Antibody

Catalog# / Size	330609 / 25 tests 330610 / 100 tests
Clone	TRA-1-60-R
Regulatory Status	RUO
Other Names	Podocalyxin, TRA-1
Isotype	Mouse IgM, κ
Description	TRA-1-60-R antibody recognizes the neuraminidase resistant form of TRA-1-60. TRA-1-60 is 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-1-60 on human ESC is downregulated upon differentiation. The soluble form of TRA-1-60 has been found in the serum of patients with embryonic cancers. Historically, TRA-1-60 is a neuroaminidase-sensitive (TRA-1-60-S) carbohydrate epitope expressed on podocalyxin, a member of the mucin-like glycoprotein CD34 family. Podocalyxin is a type I transmembrane sialoprotein with anti-adhesion properties. Further studies have shown that some of TRA-1-60 is neuraminidase resistant (TRA-1-60-R). The two forms of TRA-1-60 are essentially indistinguishable in terms of their cellular reactivity except for the difference in neuraminidase sensitivity. Both of TRA-1-60-S and TRA-1-60-R appear to be the same molecular weight glycoproteins detected by Western blot.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human embryonal carcinoma cell line 2102Ep cl.2A6
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . 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.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunofluorescence microscopy, immunohistochemical staining, acetone-fixed frozen sections, immunoprecipitation, and radioimmunoassay.
Application References	<ol style="list-style-type: none"> Miyoshi N, <i>et al.</i> 2010. <i>P. Natl. Acad. Sci. USA</i> 107:40. (IF) Kuai XL, <i>et al.</i> 2009. <i>Differentiation</i> 77:229. (WB) King F, <i>et al.</i> 2009. <i>Stem Cells Dev.</i> 18:1441. (FC)
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> Yu Z, <i>et al.</i> 2020. <i>Biol Open.</i> 9:00. PubMed Steenpass L 2017. <i>Stem Cell Res.</i> 10.1016/j.scr.2017.07.005. PubMed

3. Simic MS, *et al.* 2019. *Sci Adv.* 5:eaaw0025. [PubMed](#)
4. Neureiter A *et al.* 2018. *Stem Cell Res.* 33:20-24 . [PubMed](#)
5. Schipper L *et al.* 2018. *Stem Cell Res.* 33:41-45 . [PubMed](#)
6. Kuang YL, *et al.* 2019. *Stem Cell Res.* 37:101434. [PubMed](#)
7. D öpper H, *et al.* 2020. *Stem Cell Research.* 72.55486111. [PubMed](#)
8. Petters J, *et al.* 2020. *Stem Cell Research.* 72.42222222. [PubMed](#)
9. V ölkner C, *et al.* 2020. *Stem Cell Research.* 41:101606.. [PubMed](#)
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RRID AB_1279447 (BioLegend Cat. No. 330609)
 AB_2119065 (BioLegend Cat. No. 330610)

Antigen Details

Distribution	Embryonic stemcells
Cell Type	Embryonic Stem Cells
Biology Area	Immunology, Stem Cells
Gene ID	5420

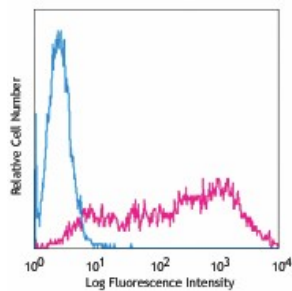
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human TRA-1-60-R, Biotin anti-human TRA-1-60-R, Alexa Fluor® 647 anti-human TRA-1-60-R, PE anti-human TRA-1-60-R, Alexa Fluor® 488 anti-human TRA-1-60-R, PerCP/Cyanine5.5 anti-human TRA-1-60-R, PE/Cyanine7 anti-human TRA-1-60-R, TotalSeq™-A1040 anti-human TRA-1-60-R

Product Data



NCCIT (human teratocarcinoma cell line) stained with TRA-1-60-R PE (red line) or mouse IgM, κ PE isotype control (blue line).

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