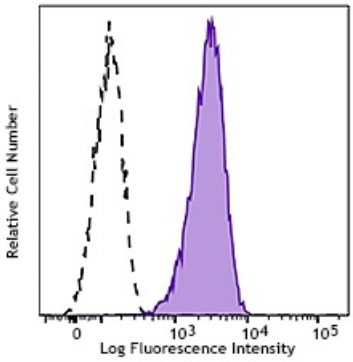
SONY

Product Data Sheet

PerCP/Cyanine5.5 anti-human CD49a

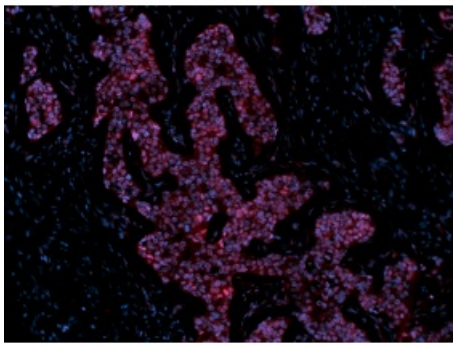
Catalog # / Size:	2241610 / 100 tests 2241605 / 25 tests
Clone:	TS2/7
Isotype:	Mouse IgG1, κ
Immunogen:	Human CTL line
Reactivity:	Human, Non-human primate, Other
Preparation:	The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)
Workshop Number:	IV N231
Concentration:	Lot-specific



HeLa cells (human cervical cancer cell lines) were stained with CD49a (clone TS2/7) PerCP/Cyanine 5.5 (filled histogram) or mouse IgG1, κ PerCP/Cyanine 5.5 isotype control (open histogram).

Applications:

Applications:	Flow Cytometry
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. It is recommended that the reagent be titrated for optimal performance for each application. * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
Application Notes:	Additional reported applications include: immunoprecipitation (1) and immunohistochemical staining (1) of acetone-fixed frozen tissue sections



Formalin-fixed paraffin-embedded human breast cancer tissue slices were deparaffinized and rehydrated. Antigen retrieval was done with Tris-Buffered Saline 1X (1.0 M, pH 7.4) at 95°C for 40 minutes, washed with PBS/0.05% Tween 20 twice for five minutes, permeabilized with 0.5% Triton X-100 for ten minutes, and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the slices were stained with 5 µg/mL anti-EGFR (clone A19002A) Alexa Fluor® 647 (red) at 4°C overnight. Nuclei were counterstained with DAPI (green). The image was captured with a 10X objective.

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Application References:
1. Hemler ME, *et al.* 1984. *J.Immunol.* 132:3011
2. Hemler ME, *et al.* 1985. *J. Biol. Chem.* 260:15246

Description: CD49a is a 200 kD type I transmembrane glycoprotein also known as α_1 integrin, VLA-1 α chain, or Integrin α_1. It associates with CD29 (β_1 integrin) to form VLA-1 complex, a collagen IV and alminin-1 receptor. It is expressed on activated T cells, monocytes, NK cells, smooth muscle cells, neuronal cells, fibroblasts, and mesenchymal cells. CD49a is an adhesion molecule and is involved in the regulation of leukocyte migration, T cell proliferation, and cytokine production.

Antigen References:
1. Zola H, *et al.* Eds. 2007. *Leukocyte and Stromal Cell Molecules:The CD Markers.* Wiley-Liss Press. p122
2. Boiret N, *et al.* 2005. *Exp. Hematol.* 33:219

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