SONY

Product Data Sheet

PE anti-human/mouse Cutaneous Lymphocyte Antigen (CLA)

Catalog # / Size: 2206560 / 100 tests
2206555 / 25 tests

Clone: HECA-452

Isotype: Rat IgM, κ

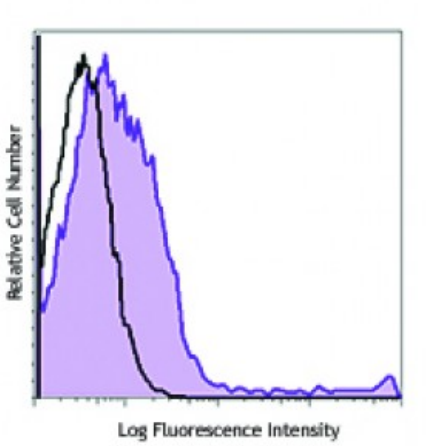
Reactivity: Human,Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Workshop Number: V S075

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CLA (clone HECA-452) PE (filled histogram) or rat IgM, κ PE 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 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: The HECA-452 antibody cross-reacts with mouse skin homing lymphocytes4. Treatment of activated HUVEC cells with HECA-452 antibody inhibits lymphocyte adhesion. Additional reported applications (for the relevant formats) include: blocking of lymphocyte binding to E-selectin3, and immunohistochemistry[1,2] of acetone-fixed frozen sections and formalin-fixed paraffin-embedded sections.

Application References:

1. Duijvestijn AM, *et al.* 1988. *Am. J. Pathol.* 130:147. (IHC)
2. Picker LJ, *et al.* 1991. *Nature* 349:796. (IHC)
3. Berg EL, *et al.* 1991. *J. Exp. Med.* 174:1461.
4. Borges E, *et al.* 1997. *J. Biol. Chem.* 272:28786.
5. Ren YL, *et al.* 2012. *Am J Clin Pathol.* 138:435. PubMed

Description: Cutaneous lymphocyte antigen (CLA) is a 140 kD homodimer protein recognized by a unique mAb, HECA-452. It is expressed on T cells in skin, subsets of peripheral blood memory T cells, NK cells, memory B cells and dendritic cells as well as on monocytes, granulocytes, and activated endothelial cells. CLA is a carbohydrate epitope of sialic acid and fucose-modified P-selectin glycoprotein ligand-1 (PSGL-1), a surface glycoprotein expressed on the majority of peripheral blood leukocytes. CLA is a ligand for E-selectin, P-selectin, and L-selectin. It plays a role in memory lymphocyte homing, tethering, and rolling.

Antigen References:

1. Picker LJ, *et al.* 1990. *Am. J. Pathol.* 136:1053.
2. Berg EL, *et al.* 1991. *J. Exp. Med.* 174:1461.
3. Fuhlbrigge RC, *et al.* 1997. *Nature* 389:978.
4. Tu L, *et al.* 1999. *J*