Technical Data Sheet

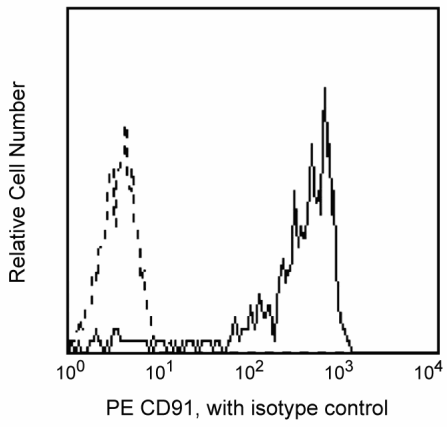
PE Mouse Anti-Human CD91

Product Information

Material Number:	**550497**
Alternate Name:	Alpha-2-macroglobulin receptor; α2MR; LRP-1; LDL Receptor-Related Protein-1
Size:	100 tests
Vol. per Test:	20 µl
Clone:	A2MR-α2
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	V MA110
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

Reacts with a 600 kDa, type I membrane single protein, also known as the α2 Macroglobulin (α2M) receptor/low density lipoprotein receptor-related protein 1 (LRP-1). Reported to be an endocytic receptor involved with intracellular signalling, lipid homeostasis, clearance of apoptotic cells, and α2 Macroglobulin mediated clearance of secreted amyloid precursor protein found in Alzheimer patients. The single chain receptor undergoes cleavage, shortly after synthesis, into the 85 kDa transmembrane β chain that non-covalently binds to the extracellular 500-515 kDa a chain. It has a broad cellular distribution, but in the hematopoietic system it is expressed on monocyte lineage cells. α2M/LRP-1 mediates endocytosis of a variety of ligands including α2M-proteinase complexes, plasminogen activators in complex with plasminogen activator inhibitor, or *Pseudomonas* Exotoxin A. Ligand binding to α2M/LRP-1 is followed by rapid transport of the ligand to lysosomes for degradation.



Profile of peripheral blood monocytes analyzed by flow cytometry.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry	Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
555749	PE Mouse IgG1, κ Isotype Control	100 tests	MOPC-21

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 × 10^6 cells in a 100-µl experimental sample (a test).
2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

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3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/colors.
5. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Kishimoto T, von dem Borne AEG, Goyert SM,et al., ed. *Leucocyte Typing VI: White Cell Differentiation Antigens.* London: Garland Publishing; 1997. (Biology)

Ranganathan S, Hattori H, Kashyap ML. A rapid flow cytometric assay for low-density lipoprotein receptors in human peripheral blood mononuclear cells. *J Lab Clin Med.* 1994; 125(4):479-486. (Biology)

Schlossman S, Boumell L, et al, ed. *Leucocyte Typing V.* New York: Oxford University Press; 1995. (Biology)