



11-157-C025

Monoclonal Antibody to CD114 / G-CSFR Purified Antibody (0.025 mg)

Clone:	LMM741
Isotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody LMM741 recognizes CD114 (colony stimulating factor 3 receptor), a 130 kDa transmembrane glycoprotein expressed on granulocytes and their differentiation stages, on monocytes, platelets, endothelial cells and placenta. It is absent from lymphocytes and erythrocytes. HLDA VI; WS Code MA98
Regulatory Status:	RUO
Immunogen:	CHO cells transfected with human CD114
Species Reactivity:	Human
Negative Species:	Mouse
Application:	Flow Cytometry
Purity:	> 95% (by SDS-PAGE)
Purification:	Purified by protein-A affinity chromatography
Concentration:	1 mg/ml
Storage Buffer:	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability:	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD114 / G-CSFR (granulocyte colony-stimulating factor receptor, also known as CSF3R) is a type I transmembrane glycoprotein which upon binding of its ligand (G-CSF, granulocyte colony-stimulating factor) homodimerizes and activates signaling transduction to mediate cell proliferation, survival, and differentiation. It is expressed by granulocytes at all stages of their differentiation, as well as by monocytes, dendritic cells, and mature platelets. Among non-hematopoietic cells, it is expressed e.g. by endothelial cells, placenta, trophoblasts, and many tumor cell lines. This antigen is a target for stem cell mobilization for blood stem cell transplantation, for enhancing recovery of myelopoiesis following chemotherapy and in the treatment of patients with severe chronic neutropenia.

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**Antibodies****References:**

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- *Layton JE, Hall NE, Connell F, Venhorst J, Treutlein HR: Identification of ligand-binding site III on the immunoglobulin-like domain of the granulocyte colony-stimulating factor receptor. *J Biol Chem.* 2001 Sep 28;276(39):36779-87.
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- *Tchou J, Zhang PJ, Bi Y, Satija C, Marjumdar R, Stephen TL, Lo A, Chen H, Mies C, June CH, Conejo-Garcia J, Puré E: Fibroblast activation protein expression by stromal cells and tumor-associated macrophages in human breast cancer. *Hum Pathol.* 2013 Nov;44(11):2549-57.
- *Cimato TR, Palka BA, Lang JK, Young RF: LDL cholesterol modulates human CD34+ HSPCs through effects on proliferation and the IL-17 G-CSF axis. *PLoS One.* 2013 Aug 26;8(8):e73861.

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