

G-CSF Monoclonal Antibody (9B4CSF), Functional Grade, eBioscience™

Product Details	
Size	500 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	9B4CSF
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_11039531

Applications	Tested Dilution	Publications
Neutralization (Neu)	Assay-Dependent	1 Publication
Functional Assay (FN)	Assay-Dependent	-

Product Specific Information

Description: This 9B4CSF monoclonal antibody reacts with mouse G-CSF (Granulocyte Colony-Stimulating Factor), a growth factor that stimulates the proliferation, differentiation, and mobilization of hematopoietic stem cells. It is expressed by monocytes, macrophages, and bone marrow stromal cells, and can also be induced in fibroblasts by IL-17A. Unlike GM-CSF and IL-3, which can stimulate cells of multiple lineages, G-CSF activity is limited to neutrophilic granulocytes. G-CSF is essential to the maintenance of neutrophil counts during homeostasis, and low basal levels of the protein are detectable in the serum of healthy individuals. Circulating levels become elevated rapidly upon infection, as G-CSF is also important for the activation and mobilization of mature neutrophils during the innate immune response. G-CSF therapy is commonly used to treat neutropenia following bone marrow transplant or chemotherapy.

This 9B4CSF antibody has been demonstrated to cross-react with human G-CSF. However, it is recommended to use Anti-Human G-CSF Functional Grade Purified (clone 4A4RC, Product # 16-7338) for neutralization of human G-CSF.

Applications Reported: This 9B4CSF monoclonal antibody inhibits the activity of mouse G-CSF.

Applications Tested: The ND50 of 9B4CSF, as measured by the inhibition of M-NFS-60 cell proliferation, is less than or equal to 150 ng/mL in the presence of 0.125 ng/mL of Mouse G-CSF Recombinant Protein. Neutralization dose will vary depending on assay method, cytokine concentration, and cell type. This antibody should be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

1 Reference

Neutralization (1)

Blood		Year
Elevating body temperature enhances hematopoiesis and neutrophil recovery after total body irradiation in an IL-1-, IL-17-, and G-CSF-dependent manner.		2012
"16-7353 was used in Blocking experiments to study the factors limiting the immune system recovery process after chemo- and radiotherapy."		Species
Authors: Capitano ML,Nemeth MJ,Mace TA,Salisbury-Ruf C,Segal BH,McCarthy PL,Repasky EA		Mouse

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