

Mouse G-CSF Antibody Pair Set

Catalog No.	E-KAB-0305	Applications	ELISA
Synonyms	CSF3, C17orf33, CSF3OS, Pluripoietin, Filgrastim, Lenograstim		

Kit components & Storage

Title	Specifications	Storage
Mouse G-CSF Capture Antibody	1 vial, 100 µg	Store at -20°C for one year. Avoid freeze / thaw cycles.
Mouse G-CSF Detection Antibody (Biotin)	1 vial, 50 µL	Store at -20°C for one year. Avoid freeze / thaw cycles.

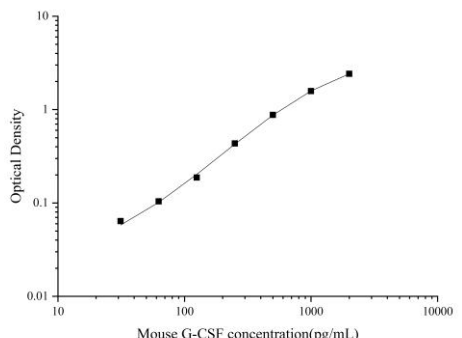
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0305)	
		Mouse G-CSF Capture Antibody	Mouse G-CSF Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Mouse G-CSF protein	Recombinant Mouse G-CSF protein
	Swissprot	P09920	
Product details	Reactivity	Mouse	Mouse
	Host	Rabbit	Rabbit
	Conjugation	Unconjugated	Biotin
	Concentration	0.5mg/mL	/
	Buffer	PBS with 0.04% Proclin 300, 50% glycerol, pH 7.4	PBS with 0.04% Proclin 300, 1% protective protein, 50% glycerol, pH 7.4
	Purify	Antigen Affinity	Antigen Affinity
	Specificity	Detects Mouse G-CSF in ELISAs.	

Applications

Mouse G-CSF Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images														
ELISA Capture	0.5-4µg/mL	Mouse G-CSF Capture Antibody	 <p>The graph is a log-log plot of Optical Density versus Mouse G-CSF concentration (pg/mL). The y-axis (Optical Density) ranges from 0.01 to 10, and the x-axis (Mouse G-CSF concentration) ranges from 10 to 10000. Six data points are plotted, showing a clear upward trend that appears linear on this scale.</p> <table border="1"> <caption>Approximate data points from the standard curve</caption> <thead> <tr> <th>Mouse G-CSF concentration (pg/mL)</th> <th>Optical Density</th> </tr> </thead> <tbody> <tr> <td>20</td> <td>0.05</td> </tr> <tr> <td>50</td> <td>0.1</td> </tr> <tr> <td>100</td> <td>0.2</td> </tr> <tr> <td>200</td> <td>0.4</td> </tr> <tr> <td>500</td> <td>0.8</td> </tr> <tr> <td>1000</td> <td>1.5</td> </tr> </tbody> </table>	Mouse G-CSF concentration (pg/mL)	Optical Density	20	0.05	50	0.1	100	0.2	200	0.4	500	0.8	1000	1.5
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ELISA Detection	1:1000-1:10000	Mouse G-CSF Detection Antibody (Biotin)															

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

Granulocyte colony-stimulating factor (G-CSF), also referred to as CSF3, is a protective cytokine with anti-inflammatory effects. G-CSF is important in promoting survival of the granulocytic lineage cells and proliferation and migration of neutrophils as well as trophoblast cells. G-CSF acts by binding to its receptor G-CSFR (also called CSF3R), which after binding with G-CSF activates the canonical Janus kinase (Jak)/signal transducer, activator of transcription (STAT) and Ras/Raf/MAP kinase pathways. G-CSF potently stimulates the proliferation and release of peripheral blood progenitor cells into the bloodstream and is therefore used to treat neutropenia after chemotherapy. Furthermore, G-CSF levels are elevated upon intensive exercise leading to increased neutrophil counts, which are predominantly due to delayed neutrophil apoptosis.