P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

Granulocyte-Colony Stimulating Factor (G-CSF); Clone SPM468
(Concentrate)

Availability/Contents:

Item #	Volume
RA0541-C.1	0.1 ml
RA0541-C.5	0.5 ml
RA0541-C1	1 ml

Description:

Species:	Mouse.
Immunogen:	Nuclei from pokeweed mitogen stimulated human peripheral blood lymphocytes.
Clone:	SPM468
Isotype:	IgG1
Entrez Gene ID:	1440
Hu Chromosome Loc.:	17q21.1
Synonyms:	Pluripoietin; Filgrastim; Lenograstim; CSF3OS; G-CSF; chromosome 17 open reading frame 33 (C17orf33); colony stimulating factor 3 (granulocyte).
Mol. Weight of Antigen:	19kDa.
Format:	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	This monoclonal antibody recognizes granulocyte-colony stimulating factor (G-CSF) in the cytoplasm of mature granulocytes. It shows no reactivity with any other cell types. It reacts with early precursor and mature forms of myeloid cells.
Background:	Markers of myeloid cells are useful in the identification of different levels of cellular differentiation. It is useful for the detection of myeloid leukemias and granulocytic sarcomas. It can be used as a marker of granulocytes in normal tissues or inflammatory processes.G-CSF is a pleiotropic cytokine that influences differentiation, proliferation and activation of the neutrophilic granulocyte lineage. The human G-CSF cDNA encodes a 207 amino acid precursor containing a 29 amino acid signal peptide that is proteolytically cleaved to form a 178 amino acid residue mature protein. Two G-CSF s, which are identical except for a three amino acid deletion in the amino-terminus of one form of the protein have been isolated from human cells. Murine and human G-CSF s share 73% sequence identity at the amino acid level.
Species Reactivity:	Reacts with human and macaque monkey. Others not known.
Positive Control:	HL60 cells, tonsil, or lymph node.
Cellular Localization:	Cytoplasmic.
Titer/ Working Dilution:	Immunohistochemistry (Formalin-fixed): 0.5-1 µg/ml Flow Cytometry: 0.5-1 µg/million cells Immunofluorescence: 1-2 µg/ml
Microbiological State:	This product is not sterile.

Storage: 2° C 8° C

ScyTek Laboratories, Inc.
205 South 600 West
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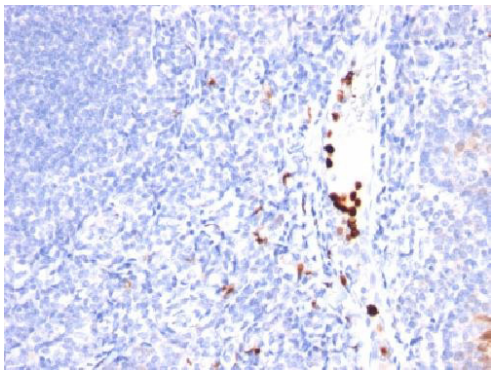
Uses/Limitations:

Not to be taken internally.
For Research Use Only.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Non-Sterile.



FFPE human tonsil stained with G-CSF; Clone SPM468.

Ordering Information and Current Pricing at www.scytek.com

Procedure:

1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Tris-EDTA HIER Solution (10x) pH 9.0 (ScyTek catalog# TES500) for 5-10 minutes at >95°C followed by cooling to room temperature for 20 minutes.

2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.

3. **Visualization:** For maximum staining intensity we recommend the "CRF Anti-Polyvalent HRP Polymer (DAB) Lab Pack" (ScyTek catalog# CPP125, see IFU for instructions), combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1. Nagata, S., et al. 1986. Molecular cloning and expression of cDNA for human granulocyte colony-stimulating factor. Nature 319: 415-418.

Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C – 8° C

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