



Product datasheet

Human G-CSF ELISA Kit, Fluorescent **ab229430**

Recombinant **CatchPoint SimpleStep ELISA**

2 Images

Overview

**Product name** Human G-CSF ELISA Kit, Fluorescent

**Detection method** Fluorescent

<b>Precision</b>	Intra-assay				
	Sample	n	Mean	SD	CV%
	Supernatant	8			3.8%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	Supernatant	3			4.3%

**Sample type** Cell culture supernatant

**Assay type** Sandwich (quantitative)

**Sensitivity** 2 pg/ml

**Range** 2.93 pg/ml - 12000 pg/ml

<b>Recovery</b>	Sample specific recovery		
	Sample type	Average %	Range
	Cell culture supernatant	108	104% - 114%

**Assay time** 1h 30m

**Assay duration** One step assay

**Species reactivity** **Reacts with:** Human

**Product overview** G-CSF (CSF3) *in vitro* CatchPoint SimpleStep ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of G-CSF (CSF3) protein in human cell culture supernatants.

This CatchPoint SimpleStep ELISA kit has been **optimized for Molecular Devices Microplate Readers**. Click [here](#) for a list of recommended Microplate Readers.

If using a Molecular Devices' plate reader supported by SoftMax® Pro software, a preconfigured protocol for these CatchPoint SimpleStep ELISA Kits is available with all the protocol and analysis settings at [www.softmaxpro.org](http://www.softmaxpro.org).

The CatchPoint SimpleStep ELISA employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. CatchPoint HRP Development Solution containing the Stoplight Red Substrate is added. During incubation, the substrate is catalyzed by HRP generating a fluorescent product. Signal is generated proportionally to the amount of bound analyte and the intensity is measured in a fluorescence plate reader at 530/570/590 nm Excitation/Cutoff/Emission.

**Notes** Granulocyte Colony Stimulating Factor (G-CSF) is a glycoprotein that stimulates bone marrow to produce and release granulocytes and stem cells into the bloodstream. G-CSF also stimulates the survival, proliferation, differentiation, and function of neutrophil precursors and mature neutrophils. G-CSF regulates neutrophil development using Janus kinase (JAK)/signal transducer and activator of transcription (STAT) and Ras/mitogen-activated protein kinase (MAPK) and phosphatidylinositol 3-kinase (PI3K)/protein kinase B (Akt) signal transduction pathway.

**Platform** Pre-coated microplate (12 x 8 well strips)

## Properties

**Storage instructions** Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
100X Stoplight Red Substrate	1 x 120µl
10X Human G-CSF Capture Antibody	1 x 600µl
10X Human G-CSF Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
500X Hydrogen Peroxide (H2O2, 3%)	1 x 50µl
Antibody Diluent 4BI	1 x 6ml
Human G-CSF Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated Black 96-Well Microplate	1 unit
Stoplight Red Substrate Buffer	1 x 12ml

**Function** Granulocyte/macrophage colony-stimulating factors are cytokines that act in hematopoiesis by

controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. This CSF induces granulocytes.

#### Sequence similarities

Belongs to the IL-6 superfamily.

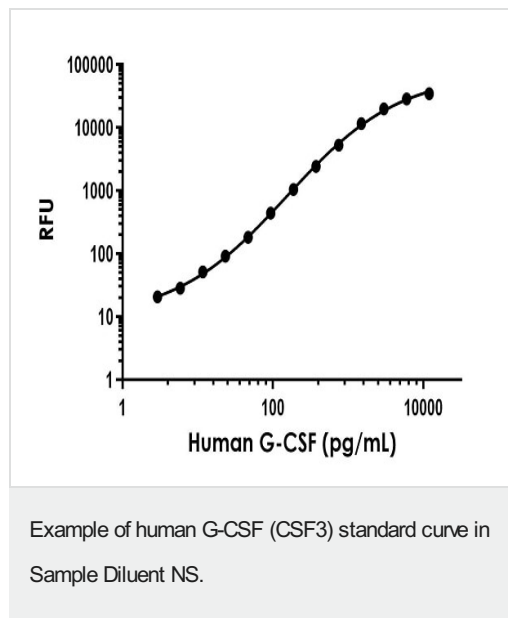
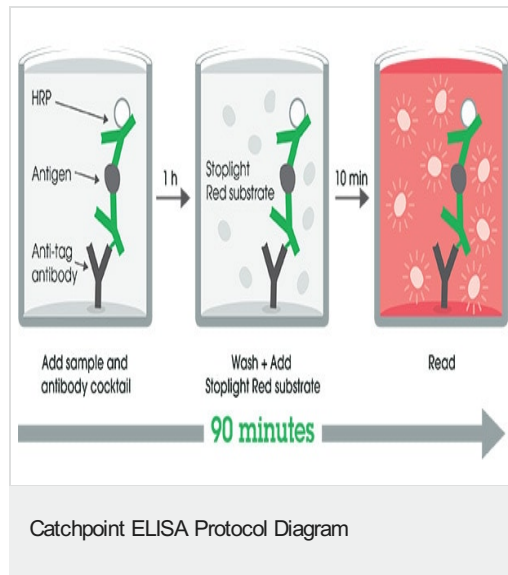
#### Post-translational modifications

O-glycan consists of Gal-GalNAc disaccharide which can be modified with up to two sialic acid residues (done in recombinantly expressed G-CSF from CHO cells).

#### Cellular localization

Secreted.

## Images



Background-subtracted data values (mean  $\pm$  SD) are graphed.

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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