

CERTIFICATE OF ANALYSIS

instaCELL GM-CSF potency assay kit

CatN°: SF340-01

Lot#: GMP-230927

Expiry Date: 15.06.2024

PRODUCT DEFINITION

Test kit to assess the potency of GM-CSF products by their application to cultures of mammalian cells and the subsequent determination of cell viability.

QUALITY SPECIFICATION OF THE CELLS

	Batch Quality Control	Specification Limits
Cell Count	2.82E+06	$2.0E+06 \leq x \leq 4.0E+06$
Homogeneity (cell count)	98%	$\geq 90\%$
Viability (after thawing)	88%	$\geq 85\%$
Proliferative Capacity	70%	$\geq 70\%$
Sterility (bacteria, yeast, fungi)	passed	negative after 7 days
Sterility (mycoplasma)	passed	negative by PCR
Morphology	passed	unaltered to reference
EC ₅₀ GM-CSF Ref.	53 pg/ml	20 pg/ml – 60 pg/ml

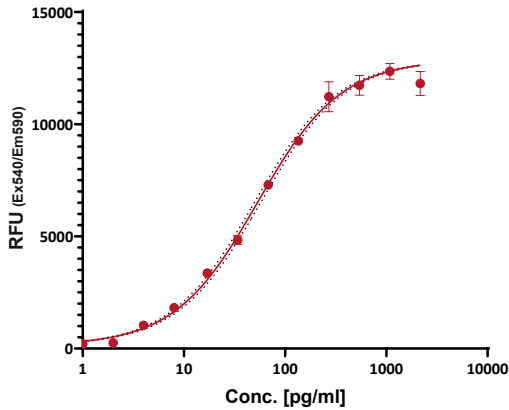
KIT CONTENT

	Cat-N°	Lot#	Storage	Quantity
Recovery Buffer M	MD164-01	91-230613ML03	-20°C	1
Assay Buffer M	MD364-06	91-230615ML01	-20°C	1
GM-CSF Reference	RX519-01	91-230615ML03	-20°C	1
Resazurin	RX718-01	91-230630ML01	-20°C	1
Assay Ready TF-1 Cells	RE509K	92-230715ML01	< -140°C	1
96-well Assay Plate	ZG02-13	2322102	RT	1

Sterility was analyzed by microscopic/visual control after seven days according to sterility testing. Functionality of the content was tested by performing the assay with all listed batches.



POTENCY ASSAY



Dose-Response curve of the GM-CSF Reference according to the assay protocol.

METHODS

Cell Viability Parameters (cell count, viability, aggregation, amount of debris) are determined in a CASY TT automatic cell counter. Homogeneity is analyzed in a plate-based assay.

Proliferative Capacity compares the mean growth rates of freshly thawed cells in relation to exponentially growing cells over 72 hours.

Sterility is tested by inoculation of aerob and anaerob growth broths (Tryptic Soy and Thioglycollate for bacteria, yeast and fungi) with samples and cultivation over a course of 7 days.

Mycoplasma are detected by PCR using a mycoplasma detection kit.

Species Identity is tested by amplification of a specific fragment of 18S rRNA coding region via multiplex PCR (dog, mouse, Chinese hamster, human, monkey, rat, pig and bovine).

Human Cell Identity is performed by STR analysis (DNA fingerprinting). Markers: D3S1358, D5S818, D7S820, D8S1179, D13S317, D16S539, D18S51, D21S11, CSF1PO, FGA, TH01, TPOX and vWA, DYS391, D2S441, D1S1656, D2S1338, Y indel, D12S391, D19S433, D22S1045, D10S1248, SE33, Amelogenin.

Potency Assay: The assay was performed according to the instaCELL protocol.

LIMITED USE: The product is provided under the terms of a limited use license provided with the kit. By breaking the sealed bag, the user is explicitly accepting the terms for limited use.

