



## Data Sheet Recombinant Human Granulocyte MacrophageColony Stimulating Factor (rh GM-CSF)

Preclinical Grade - Order No.: 1412-010 / 1412-050

**Source** A DNA sequence encoding the mature GM-CSF protein was expressed in *E. coli* 

**Production** Final manufacturing steps and QC are performed in a GMP facility

**Molecular mass** The methionyl form of the *E. coli* expressed mature human GM-CSF contains 128

amino acid residues and has a molecular mass of 14.5 kDa

**Purity**  $\geq$  95%, as determined by SDS-PAGE

**Endotoxin level** < 1000 EU/mg, as determined by LAL gel clot test

**Activity**  $\geq 6 \times 10^6$  IU/mg calibrated against the 1<sup>st</sup> International Standard NIBSC, #

88/646

Measured in a cell proliferation assay using a human factor-dependent cell line,

ΓF-1

**Sterility** Sterility test of the vialed product (direct inoculation)

**Formulation** Lyophilized from a 0.2 μm-filtered solution in PBS

Mass per vial 50 µg or 10 µg, as determined by spectrophotometrical measurement at 280 nm

**Transport** Ambient temperature

**Storage at** -20°C or below. Avoid repeated freeze-thaw cycles

**Shelf life** 3 years from date of shipment

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