


## Recombinant Human GM-CSF

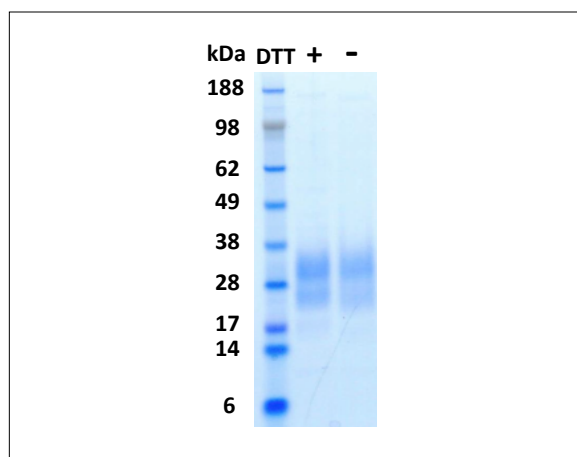
## GM-CSF HumaXpress

### Product Description

- Endotoxin-free\*
- Animal-derived product free
- Available in Bulk
- Higher Stability in Media
- 10-Fold Higher Potency

Xeno-free GM-CSF<sup>HuXp</sup> is produced in a human cell expression system in serum-free, chemically defined media. It has a demonstrated greater stability under cell culture conditions making it ideal for efficient generation of Human Dendritic Cells. (See the preferred, time saving G4 protocol available at [www.HumanZyme.com](http://www.HumanZyme.com)).

 **XENO**™ All HumaXpress® HumanKine™ cytokines are animal-component-free and Xeno-free



### Typical Specifications

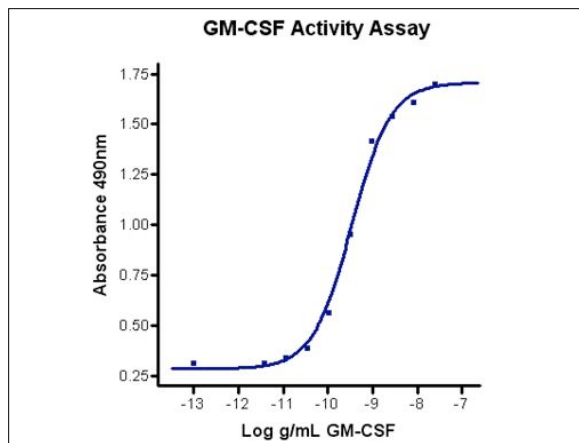
<b>Species</b>	Human
<b>Expression</b>	Human Cell Expressed
<b>Activity</b>	0.1 to 0.5 ng/mL ED50
<b>Purity</b>	>95%
<b>Endotoxin</b>	Endotoxin-free*
<b>Molecular Mass</b>	15 to 36 kDa, monomer, glycosylated

### Purity Confirmation

The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

### Activity Assay

The specific activity was determined by the dose-dependent stimulation of the proliferation of human TF-1 cells (human erythroleukemic indicator cell line).



\* Endotoxin-free ... <1 EU/μg  
All HumanKine™ cytokines are expressed in the HumaXpress® human cell expression system and intrinsically have low endotoxin levels.

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