Technical Data Sheet

Recombinant Human MIG

Product Information

Material Number: **554636**

Size: 5 µg

Storage Buffer: Frozen aqueous buffered solution containing BSA.

Description

Monokine induced by gamma interferon (MIG) is a recently described chemokine of the CXC subfamily which is one of the collection of proteins encoded by cytokine responsive genes. MIG is inducible in macrophages, hepatocytes, and endothelial cells. The synthesis of MIG is specifically induced by IFN-γ, but not by IFN-α or bacterial lipopolysaccharides. The full-length secreted protein is predicted to have 103 amino acids and a MW of 11,725 daltons. Recombinant human MIG has been reported to induce transient elevation of [Ca2+]i in human tumor infiltrating T lymphocytes (TIL) and in cultured, activated human peripheral blood-derived lymphocytes, but not in human neutrophils, monocytes, or EBV-transformed B lymphoblastoid cell lines.

Formulation and Purity: Recombinant human MIG is > 95% pure, as determined by SDS-PAGE and an absorbance assay based on the Beers-Lambert law. The endotoxin level is ≤ 0.1 ng per µg of human MIG protein, as measured in a chromogenic LAL assay. Recombinant human MIG is supplied as a frozen liquid comprised of 0.22 µm sterile-filtered aqueous buffered solution containing 10% glycerol and 1mg/ml biotechnology grade, low endotoxin bovine serum albumin, with no preservatives.

Preparation and Storage

Rapidly thaw and quick-spin product prior to use.
Avoid multiple freeze-thaws of product.
Store product at -80°C prior to use or for long term storage of stock solutions.
Upon initial thawing the product should be aliquoted into polypropylene microtubes and frozen at -80°C for future use.
Alternatively, the product can be diluted in sterile neutral buffer containing not less than 0.5 – 1 mg/ml carrier protein such as human or bovine albumin, aliquoted and stored at -80°C. For in vitro biological assay use, we recommend carrier-protein concentrations of 0.5 -1 mg/ml. For use as an ELISA standard we recommend carrier-protein concentrations of 5 -10 mg/ml.
NOTE: Failure to add carrier protein or store at indicated temperatures may result in a loss of activity.

Application Notes

Application

ELISA Standard	Routinely Tested

Recommended Assay Procedure:

ELISA Standard: Recombinant human MIG is useful as a quantitative standard for determining recombinant human MIG protein levels in an MIG specific sandwich ELISA with the purified B8-11 antibody (Cat. No. 555038) as a capture antibody and the biotinylated B8-6 (Cat. No. 555037) as the detection antibody. To obtain linear standard curves, doubling dilutions of this recombinant human MIG standard from ~2,000 to 15 pg/ml should be included in each ELISA plate. For specific methodology, please visit the protocols section or chapter on ELISA in the Immune Function Handbook, both of which are posted on our web site.

Note: This ELISA pair is recommended primarily for measuring cytokine from experimental cell culture systems. These ELISA reagents are not recommended for assay of serum or plasma samples. For measuring human MIG in serum or plasma the BD OptEIA™ Human MIG ELISA Set (Cat. No. 550998) is specially formulated and recommended.

Carrier proteins should be pre-screened for possible effects in appropriate experimental system. Carrier proteins may affect experimental results due to toxicity, high endotoxin levels or possible blocking activity.

Suggested Companion Products

Catalog Number	Name	Size	Clone
555038	Purified Mouse Anti-Human MIG	0.5 mg	B8-11
555037	Biotin Mouse Anti-Human MIG	0.5 mg	B8-6
550998	Human MIG ELISA Set	20 tests	(none)

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Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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