

PrimeGene Technical Data Sheet

Catalog Number:	641-03
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 12.5 kDa, a single non-glycosylated polypeptide chain containing 115 amino acids.
Quantity:	10µg/50µg/1000µg
AA Sequence:	MPMFIVNTNV PRASVPEGFL SELTQQLAQA TGKPAQYIAV HVVPDQLMTF SGTSDPCALC SLHSIGKIGG AQNRNYSKLL CGLLSDDLHI SPDRVYINY DMNAANVGWN GSTFA
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Test in process.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris, pH 8.0, 150 mM NaCl, 3 % trehalose.
Endotoxin:	Less than 1 EU/µg of rRtMIF as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Rat Migration Inhibitory Factor

Macrophage migration inhibitory factor (MIF or MMIF), also named as glycosylation-inhibiting factor (GIF), L-dopachrome isomerase, or phenylpyruvate tautomerase, is a protein encoded by the MIF gene. It is released from white blood cells by bacterial antigen stimulation to trigger an acute immune response, or by glucocorticoids to counter-act the inhibitory effects of glucocorticoids on immune system. MIF is a homotrimer of which each subunit contains 115 amino acids. As mentioned above, MIF is involved in the innate immune response to bacterial pathogens and counter-acts the anti-inflammatory activity of glucocorticoids. Furthermore, it also plays a role as mediator in regulating the function of macrophages in host defense and phenylpyruvate tautomerase and dopachrome tautomerase activity in vitro. Rat MIF is 99 %, 90 %, 89 %, and 89 % a.a. identical to human, murine, porcine and bovine, respectively.