### **Human Midkine Protein**

Cat. No. MID-HE401



Description	
Source	Recombinant Human Midkine Protein is expressed from E.coli with His tag and Avi Tag at the N-Terminus.
	It contains Val21-Asp143.
Accession	P21741-1
Molecular Weight	The protein has a predicted MW of 16.46 kDa same as Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE

# Formulation and Storage

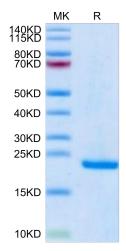
Formulation	Lyophilized from 0.22μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt20 to -80°C for 3-6 months in unopened state after reconstitution.2-8°C for 2-7 days after reconstitution.Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

# **Background**

Midkine is a heparin-binding growth factor, originally reported as the product of a retinoic acid-responsive gene during embryogenesis, but currently viewed as a multifaceted factor contributing to both normal tissue homeostasis and disease development. Midkine is abnormally expressed at high levels in various human malignancies and acts as a mediator for the acquisition of critical hallmarks of cancer, including cell growth, survival, metastasis, migration, and angiogenesis.

# **Assay Data**

### Tris-Bis PAGE



Human Midkine on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.