

**HumanKine® IL-34 (Recombinant Human)**



Animal Component-Free	Human cell expressed	Tag-Free	Endotoxin Free
-----------------------	----------------------	----------	----------------

**Product Description**

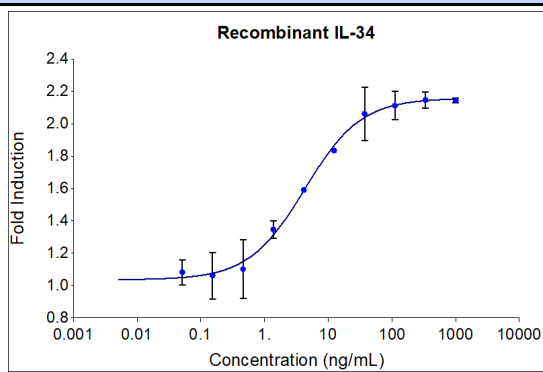
IL-34 is a 6- $\alpha$ -helix, proinflammatory cytokine that serves as a ligand for colony-stimulating factor-1 receptor (CSF1R). It is expressed most abundantly by spleen cells. It primarily stimulates human peripheral blood monocyte proliferation and macrophage colony formation. It is also required for Langerhans cell and microglia development. IL-34 has been shown to play a protective role in cancer and Alzheimer's disease, but it can promote the progression of several autoimmune, inflammatory, and metabolic diseases. As such IL-34 could be used as a biomarker to mark the progression of these diseases (PMID: 22579672, 27577879, 31940023).

Alternative Names	IL34, Interleukin-34, C16orf77, MGC34647
Source	Human Embryonic Kidney cells (HEK293). HEK293-derived IL-34 protein

**Specifications**

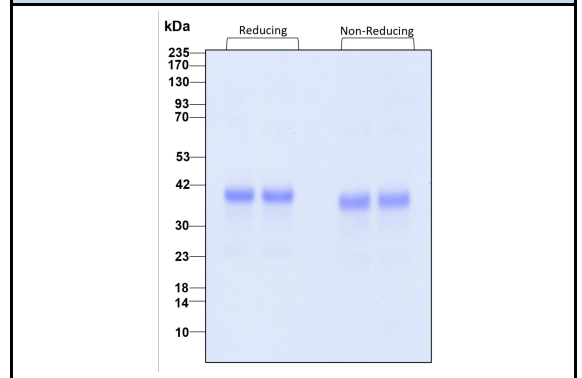
Test	Method	Specification
Activity	Dose-dependent release of MCP-1 from peripheral blood mononuclear cells, Dose-dependent stimulation of proliferation in peripheral blood mononuclear cells (PBMCs)	0.45-4.5 ng/mL in MCP-1 ELISA, 2-12 ng/mL in PBMCs Proliferation
Molecular Mass	SDS-PAGE	38 kDa reduced, 36 and 68 kDa non-reduced, homodimer, glycosylated
Purity	SDS-PAGE	>95%
Endotoxin	LAL	<1 EU/ $\mu$ g

**Activity Data**



Recombinant IL-34 (HZ-1316) stimulates dose-dependent proliferation of PBMCs. Cell number was quantitatively assessed by PrestoBlue® Cell Viability Reagent. PBMCs were treated with increasing concentrations of IL-34 for 6 days. The EC50 was determined using a 4-parameter non-linear regression model. The EC50 range is 2-12 ng/mL.

**SDS-PAGE**



Preparation	
Shipping Temperature	ambient temperature
Formulation	1 x PBS, See Certificate of Analysis for details
Reconstitution	Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein to 0.2 mg/mL in sterile 1x PBS pH 7.4 + 0.1% HSA. Gently swirl or tap vial to mix.

Stability and Storage	Product Form	Temperature Conditions	Storage Time (From Date of Receipt)
	Lyophilized	-20°C to -80°C	Until Expiry Date
	Lyophilized	Room Temperature	2 weeks
	Reconstituted as per CofA	-20°C to -80°C	6 months
	Reconstituted as per CofA	4°C	1 week
Avoid repeated freeze-thaw cycles.			

[www.ptglab.com](http://www.ptglab.com)

Document #: FR-QA118-101 Rev 0  
Data Sheet Version #: 1

**Proteintech Group, Inc.**  
5500 Pearl Street, Suite 400 Rosemont, IL 60612  
t: 1-888-478-4522; f: 1-312-455-8408  
Email: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)