

RPCB1854

Product Information

Product SKU:	RPCB1854	Gene ID:	16156	Size:	10µg
Tag:	No tag	Reactivity:	Mouse		

Additional Information

Expression Host:	E. coli	Swissprot:	P47873
Purity:	-		

Protein Information

Background: IL-11 (Interleukin 11) is a pleiotropic cytokine in the IL-6 family, which also includes LIF, CNTF, Oncostatin M, Cardiotrophin-1, IL-27 and IL-31 (1-4). In humans, IL-11 was also independently discovered as an adipogenesis inhibitory factor (AGIF) (3). The mouse IL-11 cDNA encodes a 199 amino acid (aa) precursor, which generates a 178 aa, 19 kDa mature unglycosylated protein. Mature mouse IL-11 shares 88%, 97%, and 89% aa sequence identity with human, rat and canine IL-11, respectively. IL-11 is secreted by osteoblasts, synoviocytes, fibroblasts, chondrocytes, intestinal myofibroblasts, and trophoblasts, among other cell types (1). It is found in the plasma mainly during inflammation, such as that associated with viral infection, cancer, or inflammatory arthritis, and is considered to be primarily anti-inflammatory (1). It stimulates hematopoiesis and thrombopoiesis, regulates macrophage differentiation, and confers mucosal protection in the intestine (1). It has also been found to enhance T cell polarization toward Th2, promote B cell IgG production, increase osteoclast bone absorption, protect endothelial cells from oxidative stress, and regulate epithelial proliferation and apoptosis (1). IL-11 synergizes with several other cytokines to produce these effects, and its effects overlap with those of IL-6 (1). IL-11 receptor activation requires formation of a complex of two IL-11 molecules with two molecules of the ligand-binding IL-11 R alpha subunit and two molecules of the ubiquitously expressed cell signaling beta subunit, gp130 (5). A soluble form of IL-11 R alpha can

bind IL-11 and either form a signaling complex with gp130 on the cell surface, or inhibit cell surface IL-11 R alpha /gp130 signaling (6-8).

- Protein Description:** High quality, high purity and low endotoxin recombinant Recombinant Mouse IL-11 Protein , tested reactivity in E. coli and has been validated in SDS-PAGE. 100% guaranteed.
- Endotoxin:** < 1EU/μg
- Formulation:** Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.
- Storage:** Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.