

## RPCB1900

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**Product Information**

<b>Product SKU:</b>	RPCB1900	<b>Gene ID:</b>	16160&83430	<b>Size:</b>	10µg
<b>Tag:</b>	N-His(IL-23a)&No tag(IL-12b)	<b>Reactivity:</b>	Mouse		

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**Additional Information**

<b>Expression Host:</b>	HEK293 cells	<b>Swissprot:</b>	P43432 & Q9EQ14
<b>Purity:</b>	-		

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**Protein Information**

**Background:** Interleukin 23 (IL-23) is a heterodimeric cytokine composed of two disulfide-linked subunits, a p19 subunit that is unique to IL-23, and a p40 subunit that is shared with IL-12 (1-5). The p19 subunit has homology to the p35 subunit of IL-12, as well as to other single chain cytokines such as IL-6 and IL-11. The p40 subunit is homologous to the extracellular domains of the hematopoietic cytokine receptors. Mouse p19 cDNA encodes a 196 amino acid residue (aa) precursor protein with a putative 19 aa signal peptide and 177 aa mature protein. Human and mouse p19 share 70% aa sequence identity. Although p19 is expressed by activated macrophages, dendritic cells, T $\gamma$  cells, and endothelial cells, only activated macrophages and dendritic cells express p40 concurrently to produce IL-23. The functional IL-23 receptor complex consists of two receptor subunits, the IL-12 receptor beta 1 subunit (IL-12 R beta 1) and the IL-23-specific receptor subunit (IL-23 R). IL-23 has biological activities that are similar to, but distinct from IL-12. Both IL-12 and IL-23 induce proliferation and IFN-gamma production by human T $\gamma$  cells. While IL-12 acts on both na $\gamma$ ve and memory human T cells, the effects of IL-23 is restricted to memory T cells. In mouse, IL-23 but not IL-12, has also been shown to induce memory T cells to secrete IL-17, a potent proinflammatory cytokine. IL-12 and IL-23 can induce IL-12 production from mouse splenic DC of both the CD8 $-$  and CD8 $+$  subtypes, however

only IL-23 can act directly on CD8+ DC to mediate immunogenic presentation of poorly immunogenic tumor/self peptide.

- Protein Description:** High quality, high purity and low endotoxin recombinant Recombinant Mouse IL-23/IL-12B&IL-23A Protein , tested reactivity in HEK293 cells and has been validated in SDS-PAGE.100% guaranteed.
- Endotoxin:** < 0.1 EU/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.