

## Human Interleukin-6 Receptor α (hIL-6Rα)



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10 µg

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<b>MW (kDa):</b> 38	UniProt ID: #P08887	Entrez-Gene Id: 3570
Background		The IL-6 receptor is a heterodimeric complex that consists of a ligand-binding IL-6 receptor $\alpha$ (IL-6R $\alpha$ ) subunit and a signaling component, gp130 (1). Binding of IL-6 to IL-6R $\alpha$ results in dimerization of receptor with gp130 and subsequent STAT3 activation (1). IL-6R $\alpha$ is cleaved from the cell surface by ADAM17 (1,2). In humans, soluble IL-6R $\alpha$ is also generated via alternatively spliced mRNA (1,3). Soluble IL-6R $\alpha$ binds to IL-6 and can stimulate signaling via membrane bound gp130 in a process known as "trans-signaling" (1). It is through trans-signaling that IL-6 stimulates cells that do not express membrane bound IL-6R $\alpha$ (1).
Endotoxin		Less than 0.01 ng endotoxin/1 μg hIL-6Rα.
Purity		>90% as determined by SDS-PAGE of 6 $\mu g$ reduced (+) and nonreduced (-) recombinant hIL-6R $\alpha$ . All lots are greater than 90% pure.
Source / Purification		Recombinant Human Interleukin-6 Receptor $\alpha$ (hIL-6R $\alpha$ ) Leu20 - Asp358 (Accession #NP_000556) was expressed in human 293 cells at Cell Signaling Technology.
Bioactivity		The activity of hIL-6R $\alpha$ was determined by assessing its ability to enhance IL-6 mediated inhibition of M1 cells proliferation. The ED <sub>50</sub> of each lot is between 2 and 15 ng/ml.
Background References		1. Rose-John, S. (2012) <i>Int J Biol Sci</i> 8, 1237-47. 2. Müllberg, J. et al. (1993) <i>Eur J Immunol</i> 23, 473-80. 3. Lust, J.A. et al. (1992) <i>Cytokine</i> 4, 96-100.

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