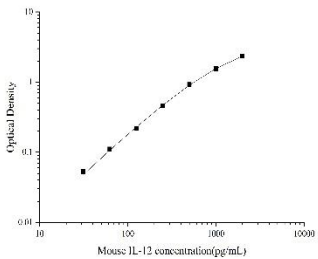




## Applications

### Mouse IL-12 Sandwich ELISA Assay

	Recommended Concentration/Dilution	Reagent	Images
ELISA Capture	0.5-4 µg/mL	Mouse IL-12 Capture Antibody	
ELISA Detection	1:1000-1:10000	Mouse IL-12 Detection Antibody (Biotin)	

**Note:** This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

## Background

Heterodimerizes with IL12B to form the IL-12 cytokine or with EBI3/IL27B to form the IL-35 cytokine. IL-12 is primarily produced by professional antigen-presenting cells (APCs) such as B-cells and dendritic cells (DCs) as well as macrophages and granulocytes and regulates T-cell and natural killer-cell responses, induces the production of interferon-gamma (IFN-gamma), favors the differentiation of T-helper 1 (Th1) cells and is an important link between innate resistance and adaptive immunity. Mechanistically, exerts its biological effects through a receptor composed of IL12R1 and IL12R2 subunits. Binding to the receptor results in the rapid tyrosine phosphorylation of a number of cellular substrates including the JAK family kinases TYK2 and JAK2. In turn, recruited STAT4 gets phosphorylated and translocates to the nucleus where it regulates cytokine/growth factor responsive genes. As part of IL-35, plays essential roles in maintaining the immune homeostasis of the liver microenvironment and functions also as an immune-suppressive cytokine. Mediates biological events through unconventional receptors composed of IL12RB2 and gp130/IL6ST heterodimers or homodimers. Signaling requires the transcription factors STAT1 and STAT4, which form a unique heterodimer that binds to distinct DNA sites.

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