

# Mouse IL-11 ELISA Kit

Catalog No: #EK5173

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## Description

Product Name	Mouse IL-11 ELISA Kit
Specificity	Mouse
Crossing Reactivity	There is no detectable cross-reactivity with other relevant proteins.
Immunogen Type	E.coli, P22-L199
Other Names	Interleukin-11; IL-11; Il11;
Accession No.	P47873
Uniprot	P47873
GeneID	16156;
Cell Localization	Secreted.

## Application Details

sensitivity:10pg mlDetect Range:31.2pg ml-2000pg mlsample\_type:cell culture supernates serum and plasma(heparin EDTA citrate).capture\_antibody:monoclonal antibody from ratdetection\_antibody:polyclonal antibody from goatgene\_name:Il11protein\_name:Interleukin-11gene\_full\_name:Interleukin-11tissue\_specificity:sequence\_similarities:tmb\_incubation:15-20minresearch\_category:cardiovascular|angiogenesis|cytokines|interleukin|immunology|adaptive immunity|b cells|non-cd|innate immunity|interleukins|secreted molecules secreted molecules|cancer|tumor immunology|stem cells|hematopoietic progenitors|myeloid|thrombocytic lineage

## Product Description

Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse IL-11

## Background

protein\_function: Cytokine that stimulates the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells and induces megakaryocyte maturation resulting in increased platelet production (PubMed:8913282). Also promotes the proliferation of hepatocytes in response to liver damage (PubMed:22253262). Binding to its receptor formed by IL6ST and either IL11RA1 or IL11RA2 activates a signaling cascade that promotes cell proliferation, also in the context of various cancers (PubMed:10026196, PubMed:23948300). Signaling leads to the activation of intracellular protein kinases and the phosphorylation of STAT3 (PubMed:23948300, PubMed:22253262). Interleukin 11 (IL-11) is a protein that in humans is encoded by the IL11 gene. The protein encoded by this gene is a member of the gp130 family of cytokines. This gene is mapped to 19q13.42. It is a key regulator of multiple events in hematopoiesis, most notably the stimulation of megakaryocyte maturation. IL-11 has been demonstrated to improve platelet recovery after chemotherapy-induced thrombocytopenia, induce acute phase proteins, modulate antigen-antibody responses, participate in the regulation of bone cell proliferation and differentiation and could be used as a therapeutic for osteoporosis. What's more, IL-11 can stimulate the growth of certain lymphocytes and it has functions in many other tissues, including the brain, gut, testis and bone. In transgenic mice, overexpression of the human IL11 gene resulted in the stimulation of bone formation to increase cortical thickness and strength of long bones.

Note: This product is for in vitro research use only