Mouse Interleukin 4,IL-4 ELISA KIT

Product Code	CSB-E04634m
Abbreviation	IL4
Protein Biological Process 1	Immunity
Uniprot No.	P07750
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates
Detection Range	31.25 pg/ml-2000 pg/ml.
Sensitivity	7.8 pg/ml
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Immunology
Gene Names	Il4
Tag Info	quantitative
Protein Description	Sandwich

Description

This mouse IL-4 ELISA kit uses the quantitative sandwich enzyme immunoassay technique to measure the levels of mouse IL-4 in the samples, including serum, plasma, and tissue homogenates. Antibody specific for IL-4 has been pre-coated onto the microplate. Standards and samples are pipetted into the wells and any IL-4 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated IL-4 antibody is added to the wells. After washing, avidin conjugated Horseradish Peroxidase (HRP) is added to the wells, forming an antibody-antigen-enzyme-labeled antibody complex. Following a wash to remove any unbound HRP-avidin, the TMB substrate solution is added to the wells and the color develops into blue. The color changes from blue to yellow after adding the stop solution to the wells. The color intensity is proportional to the amount of IL-4 bound in the initial step.

IL-4 is a key cytokine in the development of allergic inflammation due to its ability to drive the differentiation of THo lymphocytes into the TH2 phenotype and to prevent apoptosis of T lymphocytes. IL-4 also plays an important role in regulating antibody production, hematopoiesis and inflammation, and the development of effector T-cell responses. IL-4 binding to IL-4Rα induces

	heterodimerization with the common γC to form the type I receptor in hematopoietic cells or IL-13Rα1, thus activating JAK1/3 or JAK1/2 and TYK2 downstream effectors. IL-4 production and signaling have been involved in many different pathologies, including autoimmunity, infection, cancer, immunodeficiency, and allergy.
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