

## IL4

### Mouse Interleukin-4 ELISA Kit

<b>Catalog No.</b>	CK429	<b>Quantity:</b>	1 x 96 tests
<b>Description:</b>	<p>Mouse Interleukin-4 (IL4) is a pleiotropic cytokine produced by activated T-cells and is a ligand for Interleukin-4 Receptor (IL4R). IL4R also binds to IL13, which may contribute to many overlapping functions of IL4 and IL13. Signal Transducer and Activator of Transcription 6 (STAT6) has been shown to play a central role in mediating the immune regulatory signal of IL4. IL4, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with the IL4 gene particularly close to IL13. It is a 20 kDa single chain glycoprotein synthesized from 140 amino acids. IL4 enhances expression of class II MHC antigens on B-cells. It can promote their capacity to respond to other B-cell stimuli and to present antigens for T-cells. IL4 inhibits cell activation of NK-cells induced by IL2. It stimulates the proliferation of thymocytes with the marker spectrum CD4(-)CD8(-), CD4(+)CD8(-), and CD4(-)CD8(+).</p> <p>The Mouse IL4 ELISA is an <i>in vitro</i> enzyme-linked immunosorbent assay for the quantitative measurement of Mouse IL4 in serum, plasma, cell culture supernatants and urine. This assay employs an antibody specific for IL4 coated on a 96-well plate. Standards and samples are pipetted into the wells and IL4 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and Biotinylated Anti-Mouse IL4 antibody is added. After washing away unbound Biotinylated antibody, HRP-Streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of IL4 bound.</p>		
<b>Sensitivity:</b>	The minimum detectable dose of IL4 is typically less than 0.6 pg/mL.		
<b>Reproducibility:</b>	Intra-Assay: CV<10%; Inter-Assay: CV<12%		
<b>Samples:</b>	Serum, plasma, cell culture supernatants and urine.		
<b>Recovery:</b>	Serum mean recovery of 95% (range 83-102%) Plasma mean recovery of 91% (range 81-104%) Cell culture media mean recovery of 99% (range 86-106%)		
<b>Reagents Included:</b>	<ol style="list-style-type: none"> <li>1. Microplate 96-wells coated with Capture Antibody</li> <li>2. Wash Buffer Concentrate (20x)</li> <li>3. Standards</li> <li>4. Assay Diluent A: Standard/Sample-Serum/Plasma</li> <li>5. Assay Diluent B: Standard/Sample-Cell Culture Medium/Urine</li> <li>6. Biotinylated Detection Antibody</li> <li>7. HRP-Streptavidin Concentrate</li> <li>8. TMB One-Step Substrate Reagent</li> <li>9. Stop Solution</li> </ol>		
<b>Storage &amp; Stability:</b>	May be stored for up to 6 months at 2-8°C from the date of shipment. Standard should be stored below -20°C (-80°C recommended) after reconstitution. Opened Microplate Wells and reagents may be store for up to 1 month at 2-8°C. Return unused wells to the pouch containing desiccant pack, reseal along entire edge of zip seal.		

**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**