Datasheet for ABIN2648762

IL23 ELISA Kit

Go to Product page

Overview

Quantity:	96 tests
Target:	IL23
Reactivity:	Mouse
Application:	ELISA

Product Details

Sample Type:	Serum, Plasma, Cell Culture Cells
Detection Method:	Colorimetric
Sensitivity:	7pg/ml
Characteristics:	Interleukin 23 (IL-23) is a heterodimeric cytokine that is related to IL-12 (1-3). It is composed of two disulfide-linked subunits, a 19 kDa (p19) subunit that is unique to IL-23, and a 40 kDa (p40, IL-12) subunit that is shared with IL-12 (3-7). Mature mouse p19 and p40 share 88 % and 92 % aa sequence identity, respectively, with the corresponding rat subunits. IL-23 is produced by activated macrophages, microglia, and monocyte-derived dendritic cells in response to pathogens including certain bacteria and viruses and/or their components (3, 6). The functional IL-23 receptor complex consists of two receptor subunits, the IL-12 receptor-1 subunit (IL-12 R β1) and the IL-23-specific receptor subunit (IL-23 R) (7). IL-23 and IL-12 have overlapping and distinct biological activities. The IL-23 immune pathway induces the earliest recruitment of neutrophils to the site of infection, while the more classic host defense and cytotoxic response is stimulated by IL-12 (4). IL-23 has a role in the development and maintenance of a T cell subset, designated Th17, that is characterized by the production of IL-17A, IL-17F, IL-6, and TNF-α(3, 4, 8). The IL-23/IL-17 axis is an important mediator of inflammation. In mouse models, transgenic over-expression of IL-23 leads to a lethal systemic inflammatory response (9). IL-23

Product Details

	effects on Th17 cells may also enhance the development of several models of autoimmune disease including experimental allergic encephalomyelitis (EAE), collagen-induced arthritis (CIA), colitis, and diabetes (5, 8, 10-14). IL-23 may also play a role in increased tumor growth associated with chronic inflammation (15).

Target Details

Target:	IL23
Alternative Name:	IL-23 (IL23 Products)

Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Sample Volume:	100 µL
Assay Time:	3 h
Plate:	Pre-coated
Protocol:	Mouse Interleukin 23 (IL-23) ELISA Assay Kit employs the quantitative sandwich enzyme immunoassay technique. A monoclonal antibody specific for IL-23 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any IL-23 present is bound by the immobilized antibody. Following incubation unbound samples are removed during a wash step, and then a detection antibody specific for IL-23 is added to the wells and binds to the combination of capture antibody-IL-23 in sample. Following a wash to remove any unbound combination, and enzyme conjugate is added to the wells. Following incubation and wash steps a substrate is added. A colored product is formed in proportion to the amount of IL-23 present in the sample. The reaction is terminated by addition of acid and absorbance is measured at 450nm. A standard curve is prepared from seven IL-23 standard dilutions and IL-23 sample concentration determined.
Restrictions:	For Research Use only

Handling

Storage:	4 °C