

Mouse Melanocortin receptor 4 (MC4R) ELISA Kit

Catalog No: #EK9830



Package Size: #EK9830-1 48T #EK9830-2 96T

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Description

Product Name	Mouse Melanocortin receptor 4 (MC4R) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	MGC126851; MGC138197;
Accession No.	P56450
Uniprot	P56450
GeneID	17202;
Storage	<p>The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.</p> <p>The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).</p>

Application Details

Detect Range:6.25-400 pg/mL

Sensitivity:1.56 pg/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

Product Description

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate MC4R in samples. An antibody specific for MC4R has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyMC4R present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for MC4R is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of MC4R bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Melanocortin receptor 4 is a protein that in humans is encoded by the MC4R gene. It encodes the MC4 protein, a G-protein coupled receptor that binds α -melanocyte stimulating hormone (α -MSH). In murine models MC4 receptors have been found to be involved in feeding behaviour, the regulation of metabolism, sexual behaviour, and male erectile function. In 1998, it was reported that MC4R mutations were associated with inherited human obesity. They were found in heterozygotes, suggesting an autosomal dominant inheritance pattern. However, based on other research and observations, these mutations seem to have an incomplete penetrance and some degree of codominance. It has a prevalence of 1-2.5% in people with BMIs of greater than 30, making it the most commonly known genetic defect predisposing people to obesity.

Note: This product is for in vitro research use only