Mouse Rhodopsin (RHO) ELISA Kit

Catalog No: #EK7523

Package Size: #EK7523-1 48T #EK7523-2 96T

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Mouse Rhodopsin (RHO) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	CSNBAD1; MGC138309; MGC138311; OPN2; RP4; opsin 2; rod pigment|retinitis pigmentosa 4; autosomal dominant|rhodopsin (opsin 2; rod pigment) (retinitis pigmentosa 4; autosomal dominant)
Accession No.	P15409
Uniprot	P15409
GeneID	212541;
Storage	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. 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).

Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.063 ng/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 RHO in samples. An antibody specific for RHO has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyRHO present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for RHO 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 RHO bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Rhodopsin is a pigment of the retina that is responsible for both the formation of the photoreceptor cells and the first events in the perception of light. Rhodopsins belong to the G-protein coupled receptor family and are extremely sensitive to light, enabling vision in low-light conditions. Exposed to light, the pigment immediately photobleaches, and it takes about 30 minutes to regenerate fully in humans.Rhodopsin consists of the protein moiety opsin and a reversibly covalently bound cofactor, retinal. Opsin, a bundle of seven transmembrane helices, binds retinal, a photoreactive chromophore, in a central pocket. Retinal is produced in the retina from Vitamin A. Isomerization of 11-cis-retinal into all-trans-retinal by light induces a conformational change in opsin that activates the associated G protein and triggers a second messenger cascade.

Note: This product is for in vitro research use only