Product Information Sheet

Mouse KIM1 ELISA Kit

Catalog No. EK0880

Size 96T

Range 31.2pg/ml-2000pg/ml

Sensitivity < 2pg/ml

Specificity

No detectable cross-reactivity with any other cytokine.

Storage

Store at 4℃ for frequent use, at -20℃ for infrequent use.

Avoid multiple freeze-thaw cycles (Shipped with wet ice.)

Expiration

Four months at 4℃ and eight months at -20℃.

Application

For quantitative detection of Mouse KIM1 in serum, plasma, body fluids, tissue lysates or cell culture supernates.

To reorder contact us at:

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Principle

Mouse KIM1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. Mouse KIM1 specific-specific polyclonal antibodies were precoated onto 96-well plates. The Mouse specific detection monoclonal antibodies were biotinylated. The test samples and biotinylated detection antibodies were added to the wells subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Mouse KIM1 amount of sample captured in plate.

Kit Components

1. Lyophilized recombinant Mouse KIM1 standard: 10ng/tube×2.
2. One 96-well plate precoated with anti- Mouse KIM1 antibody.
3. Sample diluent buffer: 30 ml
4. Biotinylated anti- Mouse KIM1 antibody: 130µl, dilution 1:100.
5. Antibody diluent buffer: 12ml.
6. Avidin-Biotin-Peroxidase Complex (ABC): 130µl, dilution 1:100.
7. ABC diluent buffer: 12ml.
8. TMB color developing agent: 10ml.
9. TMB stop solution: 10ml.

Material Required But Not Provided

1. Microplate reader in standard size.
2. Automated plate washer.
3. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection.
4. Clean tubes and Eppendorf tubes.
5. Washing buffer (neutral PBS or TBS).

   Preparation of 0.01M **TBS:** Add 1.2g Tris, 8.5g Nacl; 450µl of purified acetic acid or 700µl of concentrated hydrochloric acid to 1000ml H_2O and adjust pH to 7.2-7.6. Finally, adjust the total volume to 1L.

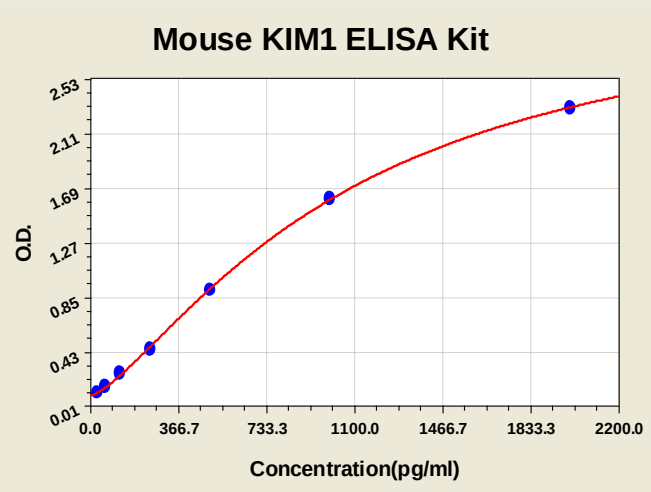
   Preparation of 0.01 M **PBS:** Add 8.5g sodium chloride, 1.4g Na_2HPO_4 and 0.2g NaH_2PO_4 to 1000ml distilled water and adjust pH to 7.2-7.6.

Finally, adjust the total volume to 1L.

Notice for Application of Kit

1. Before using Kit, spin tubes and bring down all components to bottom of tube.
2. Duplicate well assay was recommended for both standard and sample testing.
3. Don't let 96-well plate dry, dry plate will inactivate active components on plate.
4. In order to avoid marginal effect of plate incubation due to temperature difference (reaction may be stronger in the marginal wells), it is suggested that the diluted ABC and TMB solution will be pre-warmed in 37℃ for 30 min before using.

Mouse KIM1 ELISA Kit-1X96 Well Plate Image



Background

KIM1（TIM-1），also known as Hepatitis A virus cellular receptor 1, is a protein that in Mouses is encoded by the *HAVCR1* gene.[1][2][3] Infection of canine osteogenic sarcoma cells expressing HAVCR1 with HAV led Feigelstock et al. (1998) to conclude that the protein is indeed a receptor for the virus. Immunofluorescence microscopy demonstrated internalization of HAV by dog cells expressing HAVCR1. Using a monoclonal antibody to mouse Tim1, Umetsu et al. (2005) showed that Tim1 was expressed after activation of naive T cells and on T cells differentiated in Th2-polarizing conditions. By homology of synteny with the mouse Tim1 gene and database analysis, McIntire et al. (2001) mapped the HAVCR1 gene to 5q33.2. The standard used in this kit is recombinant mouse KIM-1, constituting from Y22-T212 amino acids, and 191amino acids with the molecular mass of 21.8KDa.

Reference

1. **^** Feigelstock D, Thompson P, Mattoo P, Zhang Y, Kaplan GG (Aug 1998). "The Mouse homolog of HAVcr-1 codes for a hepatitis A virus cellular receptor". *J Virol* **72** (8): 6621–8.

2. **^** McIntire JJ, Umetsu SE, Akbari O, Potter M, Kuchroo VK, Barsh GS, Freeman GJ, Umetsu DT, DeKruyff RH (Nov 2001). "Identification of Tapr (an airway hyperreactivity regulatory locus) and the linked Tim gene family". *Nat Immunol* **2** (12): 1109–16. doi:10.1038/ni739..

3. **^** "Entrez Gene: HAVCR1 hepatitis A virus cellular receptor 1". http://www.ncbi.nlm.nih.gov/sites/entrez?Db=gene&Cmd=ShowDetailView&TermToSearch=26762