Product Information Sheet

Mouse VEGF ELISA Kit

Catalog No. EK0541

Size 96T

Range 15.6pg/ml-1000pg/ml

Sensitivity < 2 pg/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 VEGF in sera, plasma, body fluids, tissue lysates or cell culture supernates.

To reorder contact us at:

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Principle

Mouse VEGF ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. Mouse VEGF specific-specific polyclonal antibodies were precoated onto 96-well plates. The mouse specific detection polyclonal 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 VEGF amount of sample captured in plate.

Kit Components

1. Lyophilized recombinant mouse VEGF standard: 10ng/tube×2.
2. One 96-well plate precoated with anti- mouse VEGF antibody.
3. Sample diluent buffer: 30 ml
4. Biotinylated anti- mouse VEGF 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 and Automated plate washer.
2. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended if there is a large amount of samples for detection.
3. Clean tubes and Eppendorf tubes.
4. 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.

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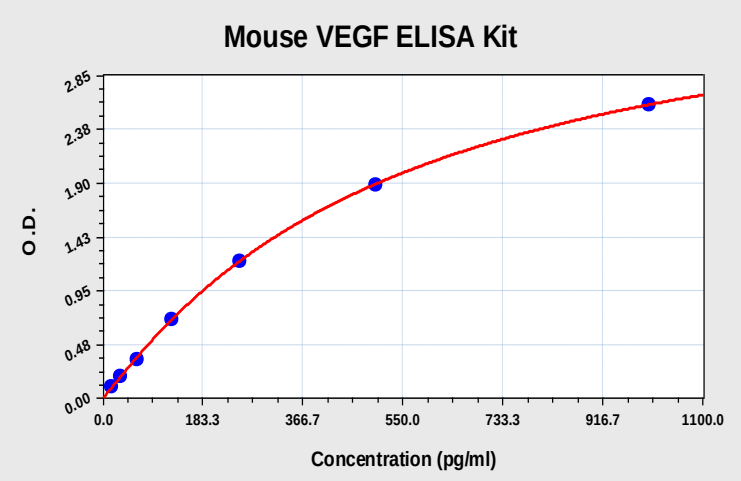
Notice for Application of Kit

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 VEGF ELISA Kit-1X96 Well Plate Image



Background

Vascular permeability factor/vascular endothelial growth factor (VPF/VEGF), a potent cytokine expressed by most malignant tumors, has critical roles in vasculogenesis and both physiological and pathological angiogenesis.[1] VEGF produced by tumor cells potently stimulates endothelial cell proliferation and angiogenesis and plays a key role in the pathophysiology of several neoplasias.[2] VEGF may also play a pivotal role in mediating the development and progression of diabetic retinopathy.[3] VEGF, a major regulator of angiogenesis, binds to two receptor tyrosine kinases, KDR/Flk-1 and Flt-1.[4] The VEGF gene is mapped by fluorescence in situ hybridization to chromosome 6p12.[5] The standard product used in this kit is recombinant mouse VEGF164, a 42KDa dimer.

Reference

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5. Wei, M.-H.; Popescu, N. C.; Lerman, M. I.; Merrill, M. J.; Zimonjic, D. B. Localization of the human vascular endothelial growth factor gene, VEGF, at chromosome 6p12. *Hum. Genet.* 97: 794-797, 1996.