

Datasheet for ABIN2859238

HFE2 ELISA Kit[Go to Product page](#)**1** Image

Overview

Quantity:	96 tests
Target:	HFE2
Binding Specificity:	AA 33-393
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10.000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse Hemojuvelin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: Q33-D393
Specificity:	Expression system for standard: NSO Immunogen sequence: Q33-D393
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	HFE2
Alternative Name:	HFE2 (HFE2 Products)
Background:	<p>Protein Function: Acts as a bone morphogenetic protein (BMP) coreceptor. Through enhancement of BMP signaling regulates hepcidin (HAMP) expression and regulates iron homeostasis. .</p> <p>Background: Hemojuvelin (HJV/RGMC/HFE2) is a membrane-bound and soluble protein in mammals. It is a member of a three gene family (in vertebrates) called the repulsive guidance molecules. In mouse, the Hemojuvelin protein is encoded by the HFE2 gene, and it is mapped to Chromosome 3. It was concluded that downregulation of hepatic Hemojuvelin during inflammation may induce a temporary elimination of iron sensing. Hemojuvelin is a coreceptor for bone morphogenetic proteins (BMPs), and inhibition of endogenous BMP signaling reduces hepcidin expression and increases serum iron in mice. Furthermore, Hemojuvelin may play inhibitory roles in prostate cancer by suppressing cell growth, adhesion, migration and invasion.</p> <p>Synonyms: Hemojuvelin, Hemochromatosis type 2 protein homolog, RGM domain family member C, Hfe2, Rgmc,</p> <p>Full Gene Name: Hemojuvelin</p> <p>Cellular Localisation: Cell membrane, Lipid-anchor, GPI-anchor . Also released in the extracellular space..</p>
Gene ID:	69585
UniProt:	Q7TQ32
Pathways:	Transition Metal Ion Homeostasis

Application Details

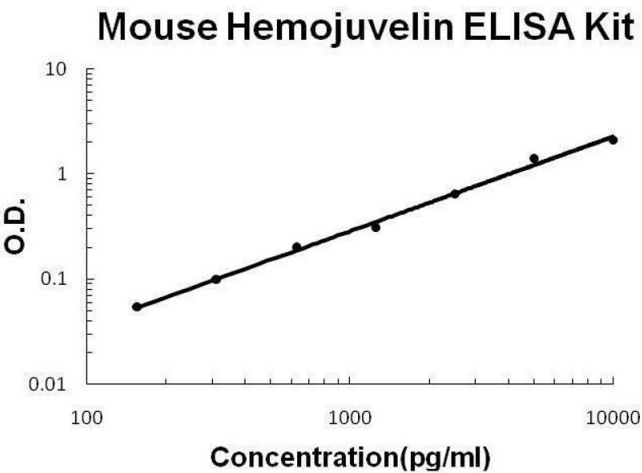
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
--------------------	--

Application Details

Comment:	Tissue Specificity: Muscle cell lineage. .
Plate:	Pre-coated
Protocol:	mouse Hemojuvelin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Hemojuvelin has been precoated onto 96-well plates. Standards(NSO, Q33-D393) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Hemojuvelin is added 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 Hemojuvelin amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 10,000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL mouse Hemojuvelin standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse Hemojuvelin standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 1.43, Standard deviation: 0.073, CV(%): 5.1• Sample 2: n=16, Mean(ng/ml): 3.06, Standard deviation: 0.113, CV(%): 3.7• Sample 3: n=16, Mean(ng/ml): 5.72, Standard deviation: 0.223, CV(%): 3.9,• Sample 1: n=24, Mean(ng/ml): 1.46, Standard deviation: 0.11, CV(%): 7.5• Sample 2: n=24, Mean(ng/ml): 3.24, Standard deviation: 0.237, CV(%): 7.3• Sample 3: n=24, Mean(ng/ml): 5.91, Standard deviation: 0.402, CV(%): 6.8
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C, 4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months



ELISA

Image 1. Mouse Hemojuvelin PicoKine ELISA Kit standard curve