



Recombinant Protein Technical Manual

Recombinant Human Hemojuvelin/HFE2 Protein (His Tag)

RPE3434

Product Data:

Product SKU: RPE3434

Size: 50µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: Q6ZVN8

Protein Information:

Molecular Mass: 40 kDa

AP Molecular Mass: 20, 34 & 44 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, 500mM NaCl, pH 7.0, 10% gly

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: HFE2A;HJV;JH;RGMC

Immunogen Information:

Sequence: Met 1-Ser 399

Background:

Hemojuvelin, also known as HFE2, is a membrane-bound and soluble protein which belongs to the repulsive guidance molecule (RGM) family. It is known that RGMs function through Neogenin, a homologue of the Netrin receptor deleted in colon cancer. In mammals, RGM family consists of three glycoproteins which have discrete expression patterns and functions (RGM-A, RGM-B, and RGM-C). Hemojuvelin is expressed in adult and fetal liver, heart, and skeletal muscle. Hemojuvelin acts as a bone morphogenetic protein (BMP) coreceptor. Enhancement of BMP signaling regulates hepcidin (HAMP) expression and iron metabolism. It plays a key role in iron metabolism. Hemojuvelin represents the cellular receptor for hepcidin. It may be a component of the signaling pathway which activates hepcidin or it may act as a modulator of hepcidin expression. Defects in hemojuvelin are the cause of hemochromatosis type 2A, also known as juvenile hemochromatosis (JH).