

Anti-Hepcidin-25 [23F11] Standard Size Ab03569-11.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

Isotype and Format: Human IgG2, Fc Silent™, Kappa

Clone Number: 23F11

Alternative Name(s) of Target: HAMP; hHepc; HEPC; LEAP1; LEAP-1; Hepcidin; Liver-expressed antimicrobial peptide 1

UniProt Accession Number of Target Protein: P81172

Published Application(s): ELISA

Published Species Reactivity: Human

Immunogen: The original antibody was generated by immunizing Xenomouse™ IgG2κλ and IgG4κλ with KLH-conjugated human hepcidin peptide 'DTHFPICIFCCGCCHRSKCGMCCKT'.

Specificity: This antibody is specific for amino acids 'DTHFPICIFCCGCCHRSKCGMCCKT' of human hepcidin-25 and does not cross react with murine hepcidin-25. Hepcidin is a an iron-regulating peptide hormone made in the liver. Hepcidin is a cationic, cysteine-rich and tightly folded peptide stabilized by 4 disulfide bonds that plays a major role in innate immunity and iron homeostasis. It controls the delivery of iron to blood plasma from intestinal cells absorbing iron, from erythrocyte-recycling macrophages, and from iron-storing hepatocytes. Hepcidin acts by binding to and inactivating the sole cellular iron exporter, ferroprotein, which delivers iron to plasma from all iron-transporting cells.

Application Notes: The original IgG antibody binds human hepcidin-25 with a binding affinity of $K_d = 70$ pM (PMID: 19553669). This antibody can be used in combination with another anti-hepcidin antibody 19D12 for detection of human hepcidin in human serum using a sandwich ELISA. 19D12 was used as a capture antibody and 23F11 was used for detection. The limit of sensitivity for the assay was 30 pg/mL (PMID: 23945155).

Antibody First Published in: Cooke et al. A fully human anti-hepcidin antibody modulates iron metabolism in both mice and nonhuman primates. Blood. 2013 Oct 24;122(17):3054-61. [PMID:23945155](#)

Note on publication: Describes the development of a fully human antibody for use as a potential therapeutic to treat anemia of inflammation (AI) in patients with kidney disease or cancer.

Product Form

Size: 100 µg Purified antibody.

Purification:

Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.