

## Anti-Hepcidin-25 [AN-LP1] Standard Size Ab03568-10.3

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

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgG1, Fc Silent™, Kappa

**Clone Number:** AN-LP1

**Alternative Name(s) of Target:** HAMP; hHepc; HEPC; LEAP1; LEAP-1; Hepcidin; Liver-expressed antimicrobial peptide 1; CNCM I-3794

**UniProt Accession Number of Target Protein:** P81172

**Published Application(s):** functional assay, WB, ELISA, IHC

**Published Species Reactivity:** Human

**Immunogen:** The original antibody was generated by immunizing mice with human hepcidin peptide 'DTHFPICIFCCGCCCHRSKCGMCKT'.

**Specificity:** This antibody is specific for amino acids 'DTHFPICIFCCGCCCHRSKCGMCKT' 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 mouse IgG1 antibody binds human hepcidin-25 with a binding affinity of  $K_d = 99$  pM. The binding characterization of this antibody to synthetic human hepcidin-25 was done using ELISA. This antibody can be used for the identification of synthetic human hepcidin or human hepcidin from the sera of patients with an inflammatory disease using dot blot and western blot. This antibody was also used for the immunohistochemical analysis of paraffine-embedded human liver biopsies. The biological activity of this antibody was tested by incubating this antibody with macrophages from J774 murine cell line, and it was reported that this antibody induces ferroprotein degradation (US8487081).

**Antibody First Published in:** [PMID:](#)

**Note on publication:**

## 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.