



Recombinant Protein Technical Manual
Recombinant Human LCN1/VEGP/Lipocalin Protein
(His Tag)
RPES0945

Product Data:

Product SKU: RPES0945

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_002288.1

Protein Information:

Molecular Mass: 19 kDa

AP Molecular Mass: 20 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, pH 7.4

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

Application:

Synonyms: Lipocalin 1;MGC71975;PMFA;TLC;TP;VEGP

Immunogen Information:

Sequence: Met 1-Asp176

Background:

Lipocalin, also known as Von Ebner gland protein, VEG protein, Tear prealbumin, VEGP, Tear lipocalin and LCN1, is a secreted protein which belongs to the calycin superfamily and Lipocalin family. Human Lipocalin / VEGP was originally described as a major protein of human tear fluid, which was thought to be tear specific. Lipocalin / VEGP is identical with lingual von Ebner's gland protein, and is also produced in prostate, nasal mucosa and tracheal mucosa. Homologous proteins have been found in rat, pig and probably dog and horse. Lipocalin / VEGP is an unusual lipocalin member, because of its high promiscuity for relative insoluble lipids and binding characteristics that differ from other members. Lipocalin / VEGP acts as the principal lipid binding protein in tear fluid, a more general physiological function has to be proposed due to its wide distribution and properties. Lipocalin / VEGP would be ideally suited for scavenging of lipophilic, potentially harmful substances and thus might act as a general protection factor of epithelia. Lipocalin / LCN1 could play a role in taste reception. It could be necessary for the concentration and delivery of sapid molecules in the gustatory system. Lipocalin / LCN1 can bind various ligands, with chemical structures ranging from lipids and retinoids to the macrocyclic antibiotic rifampicin and even to microbial siderophores. It exhibits an extremely wide ligand pocket.