

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Lipocalin-1 in direct ELISAs and Western blots. In these formats, less than 5% cross-reactivity with recombinant human Lipocalin-2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Lipocalin-1 (R&D Systems, Catalog # 1708-PI) His19-Asp176 Accession # P31025
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human Lipocalin-1 (Catalog # 1708-PI)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted.

BACKGROUND

Lipocalin-1, also known as tear prealbumin or von Ebner's gland protein (VEGP), is encoded by the LCN1 gene (1 - 3). It is a member of the Lipocalin superfamily that binds many different classes of lipophilic chemicals (4). Lipocalin-1 contains three sequence motifs similar to the cystatins, a superfamily of cysteine protease inhibitors (5). In fact, it has been suggested that Lipocalin-1 is a physiological inhibitor of cysteine proteases and plays a role in the control of inflammatory processes in oral and ocular tissues (5). rhLipocalin-1 corresponds to the mature and secreted protein. It is a weak inhibitor of cysteine proteases such as cathepsin V, which is similar to rhCystatin S (R&D Systems, Catalog # 1296-PI).

References:

1. Redl, B. *et al.* (1992) J. Biol. Chem. **267**:20282.
2. Blaker, M. *et al.* (1993) Biochim. Biophys. Acta **1172**:131.
3. Lassagne, H. and A.M. Gachon (1993) Exp. Eye Res. **56**:605.
4. Redl, B. *et al.* (2000) Biochim. Biophys. Acta **1482**:241.
5. van't Hof, W. *et al.* (1997) J. Biol. Chem. **272**:1837.