

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Lipocalin-1 in Western blots. In this format, approximately 5% cross-reactivity with rhLipocalin-2 and rmLipocalin-2 is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Lipocalin-1 (R&D Systems, Catalog # 1708-PI) His19-Asp176 Accession # P31025
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. 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.

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

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.

## 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.