

## Polyclonal Antibody against human Lipocalin-2

Catalog Number: 161001

Size: 100 mg

Host: Rabbit

### Introduction

Iron-trafficking protein involved in multiple processes such as apoptosis, innate immunity and renal development. Binds iron through association with 2,5-dihydroxybenzoic acid (2,5-DHBA), a siderophore that shares structural similarities with bacterial enterobactin, and delivers or removes iron from the cell, depending on the context. Iron-bound form (holo-24p3) is internalized following binding to the SLC22A17 (24p3R) receptor, leading to release of iron and subsequent increase of intracellular iron concentration. In contrast, association of the iron-free form (apo-24p3) with the SLC22A17 (24p3R) receptor is followed by association with an intracellular siderophore, iron chelation and iron transfer to the extracellular medium, thereby reducing intracellular iron concentration. Involved in apoptosis due to interleukin-3 (IL3) deprivation: iron-loaded form increases intracellular iron concentration without promoting apoptosis, while iron-free form decreases intracellular iron levels, inducing expression of the proapoptotic protein BCL2L1/BIM, resulting in apoptosis. Involved in innate immunity, possibly by sequestering iron, leading to limit bacterial growth.[1]

### Immunogen:

Recombinant full-length human Lipocalin-2 (LCN2) expressed in *E. coli*.

### Preparation:

Rabbit IgG was purified by protein G affinity chromatography.

### Specificity:

The antibody detects human LCN2.

**Form:** Liquid

**Storage buffer:** PBS

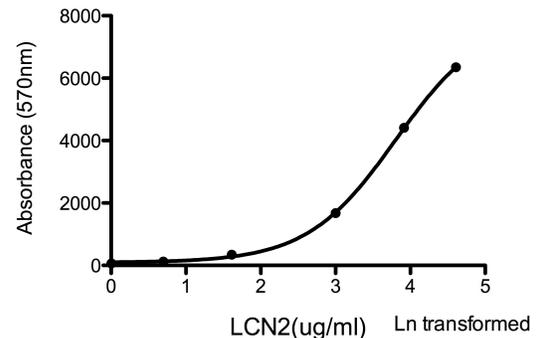
**Storage instructions:** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term. Avoid freeze / thaw cycle.

### Applications:

**Turbidimetric Immunoassay** - This antibody can be used in turbidimetric immunoassay to detect human LCN2.

### Reference:

1. Yang, J., et al., *An iron delivery pathway mediated by a lipocalin*. Mol Cell, 2002. **10**(5): p. 1045-56.



Turbidimetric immunoassay of LCN2 (the figure is from Prof.Xu's lab, HKU)