Datasheet for ABIN7321230

# Lipocalin 2 Protein (LCN2) (His tag)

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## 1 Image

## Overview

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| Quantity: | 100 µg |
| Target: | Lipocalin 2 (LCN2) |
| Origin: | Rat |
| Source: | Baculovirus infected Insect Cells |
| Protein Type: | Recombinant |
| Biological Activity: | Active |
| Purification tag / Conjugate: | This Lipocalin 2 protein is labelled with His tag. |

## Product Details

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| Purpose: | Recombinant Rat LCN2/NGAL Protein (His Tag)(Active) |
| Sequence: | Met 1-Asn 198 |
| Characteristics: | A DNA sequence encoding the rat LCN2 (P30152) (Met 1-Asn 198) was fused with a polyhistidine tag at the C-terminus. |
| Purity: | > 90 % as determined by SDS-PAGE |
| Endotoxin Level: | < 1.0 EU per µg of the protein as determined by the LAL method |
| Biological Activity Comment: | Measured by its ability to bind Iron(III) dihydroxybenzoic acid [Fe(DHBA)3]. The binding of Fe(DHBA)3 results in the quenching of Trp fluorescence in Lipocalin2. It binds >1.0 µM of Fe(DHBA)3. |

## Target Details

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| Target: | Lipocalin 2 (LCN2) |

 

## Target Details

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| Alternative Name: | LCN2/NGAL (LCN2 Products) |
| Background: | Background: Lipocalin-2 (LCN2), also known as neutrophil gelatinase-associated lipocalin (NGAL), is a 25 kDa protein belonging to the lipocalin superfamily. It was initially found in activated neutrophils, however, many other cells, like kidney tubular cells, may produce NGAL in response to various insults. This protein is released from injured tubular cells after various damaging stimuli, is already known by nephrologists as one of the most promising biomarkers of incoming Acute Kidney Injury (AKI). Recent evidence also suggests its role as a biomarker in a variety of other renal and non-renal conditions. Moreover, recent studies seem to suggest a potential involvement of this factor also in the genesis and progression of chronic kidney diseases. NGAL is the first known mammalian protein which specifically binds organic molecules called siderophores, which are high-affinity iron chelators. NGAL, first known as an antibacterial factor of natural immunity, and an acute phase protein, is currently one of the most interesting and enigmatic proteins involved in the process of tumor development. acting as an intracellular iron carrier and protecting MMP9 from proteolytic degradation, NGAL has a clear pro-tumoral effect, as has already been observed in different tumors (e.g. breast, stomach, oesophagus, brain) in humans. In thyroid carcinomas, NGAL is strongly induced by NF-kB, an important factor involved both in tumor growth and in the link between chronic inflammation and neoplastic development. Thus, Lipocalin-2 (LCN2/NGAL) has been implicated in a variety of processes including cell differentiation, proliferation, survival and morphogenesis. Synonym: LCN2 |
| Molecular Weight: | 21.9 kDa |
| UniProt: | P30152 |
| Pathways: | Cellular Response to Molecule of Bacterial Origin, Transition Metal Ion Homeostasis |

## Application Details

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| Restrictions: | For Research Use only |

## Handling

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| Format: | Lyophilized |
| Reconstitution: | Please refer to the printed manual for detailed information. |
| Buffer: | Lyophilized from sterile 20 mM Tris, 500 mM NaCl, 10 % glycerol, pH 7.0 |
| Storage: | 4 °C,-20 °C,-80 °C |

## Handling

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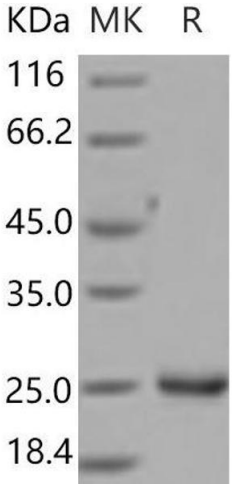
| Storage Comment: | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |

## Images




**Western Blotting**

**Image 1.**