

Datasheet for KOA0516**Rat Lipocalin-2 - NGAL ELISA Kit****Overview**

Description:	Rat Lipocalin-2/NGAL AccuSignal ELISA Kit - KOA0516
Item No.:	KOA0516
Size:	1 Kit
Applications:	ELISA
Reactivity:	Rat
Range:	78 pg/ml - 5000 pg/ml

Product Details

Background:	Lipocalin-2(LCN2), also known as NGAL, is a protein associated with neutrophil gelatinase. ¹ The LCN2 gene is located at 9q34 and contains 7 exons. ² The 25-kD LCN2 protein is believed to bind small lipophilic substances such as bacteria-derived lipopolysaccharide(LPS) and formylpeptides and may function as a modulator of inflammation. NGAL tightly binds bacterial catecholate-type ferric siderophores through a cyclically permuted, hybrid electrostatic/cation-pi interaction and is a potent bacteriostatic agent in iron-limiting conditions. ³ The primary LCN2 transcript is 3,696 nucleotides long, and the processed transcript is 809 nucleotides long. ⁴ LCN2 expression in adult bone marrow, uterus, prostate, salivary gland, stomach, appendix, colon, trachea, and lung, and in fetal spleen and lung. The standard product used in this kit is recombinant rat NGAL, consisting of 177 amino acids with the molecular mass of 21kDa.
Synonyms:	24p3, 25 kDa alpha-2-microglobulin-related subunit of MMP-9, HNL, Lcn2, Lipocalin 2, Lipocalin-2, Migration stimulating factor inhibitor, MSFI, Neutrophil gelatinase-associated lipocalin, NGAL, NGAL_HUMAN, Oncogene 24p3, p25, Siderocalin, Siderocalin LCN4
Detection Kit Type:	ELISA Kit
Detection Range:	78 pg/ml - 5000 pg/ml
Sensitivity:	<10 pg/ml

Target Details

Gene Name:	LCN2
Reactivity:	Rat

Immunogen:	Expression system for standard: NSO; Immunogen sequence: Q21-N198
Purity/Specificity:	Natural and recombinant rat NGAL. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P30152 • NCBI - NP_570097.1 • GeneID - 170496 • KOA0516 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 5000pg/ml, 2500pg/ml, 1250pg/ml, 625pg/ml, 313pg/ml, 156pg/ml, 78pg/ml rat NGAL standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of rat cell culture supernates, serum, plasma(heparin) or urine to each empty well. It is recommended that each rat NGAL standard solution and each sample be measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	DOE: 2-8° C - 01/27/21 -20° C - 07/28/21

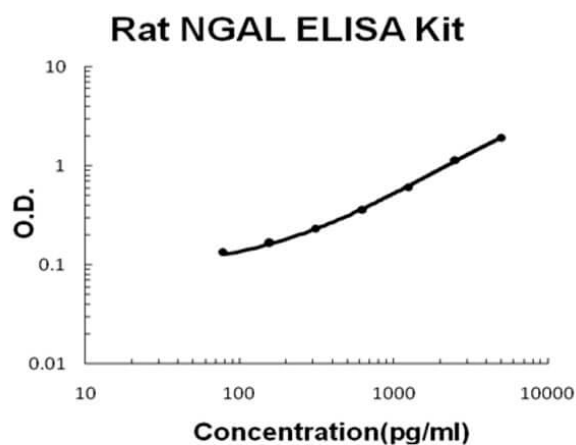
Formulation

Concentration:	1 Kit
Anticoagulant:	Heparin Sodium

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.
Expiration:	See kit insert for complete instructions.

Images



ELISA

Rat Lipocalin-2/NGAL AccuSignal ELISA Kit standard curve.
Assay Range: 78pg/ml-5000pg/ml. Sensitivity: <10pg/ml.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.