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Monoclonal Antibody to Porcine Lipocalin 2

Neutrophil Protein, Marker of Kidney Disease

Monoclonal antibody PNL110 recognizes the formaldehyde-derived form of porcine Lipocalin 2 (LCN2), also known as Neutrophil Gelatinase-Associated Lipocalin (NGAL). LCN2 is a 25kDa protein belonging to the lipocalin superfamily. Porcine LCN2 (F1RRX1) contains 15 lysine residues which are available for chemical modification with formaldehyde. Neutrophils are the main source of plasma LCN2. Mature peripheral neutrophils store the protein in granules. LCN2 functions as an inflammatory modulator of the innate immune system by binding high-affinity iron-chelating compounds secreted by microorganisms (siderophores). This reduces iron available to microorganisms and inhibits their growth, for example also in the jejunum after pathogenic bacterial infection.
Diagnostically, LCN2 was found to have its gene strongly upregulated and its protein synthesis induced after acute kidney injury. LCN2 is actually detected in the blood and urine after acute kidney injury and may represent a valuable biomarker that correlates with the severity of renal impairment in acute and chronic conditions

This antibody was produced in vitro in bioreactors.

TECHNICAL AND ANALYTICAL CHARACTERISTICS

Product Number:	T-3557 (Lot 01PO1804)
Clone:	PNL110
Host species, isotype:	Mouse IgG2b
Quantity:	200µg
Format:	Affinity purified from cell culture supernatant, lyophilized, packaged under nitrogen. Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.4mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 6mg/ml bovine serum albumin (BSA) as a stabilizer and 0.05% (v/v) Kathon™ CG as a preservative.
Stability:	Original vial: 1 year at 4° - 8°C from date of purchase. Avoid freeze-thaw cycles.
Applications:	Tested for immunohistochemistry (IHC). **Approximate working dilution for IHC:** Paraffin sections: 4µg/ml (1:100); pretreatment with Proteinase K for antigen retrieval is recommended (T-3401) Optimal dilutions should be determined by the end user Suggested positive control: swine spleen Please see **www.bma.ch** for protocols and general information

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Immunogen:	Porcine neutrophil extract
Protein database:	pig-F1RRX1
Antigen, epitope:	The antibody reacts with formaldehyde-treated recombinant porcine Lipocalin 2, the epitope has not been further characterized.
Antigen distribution:	**Tissue sections:** Porcine LCN2 (F1RRX1) is found on neutrophils in all organs tested so far (stomach, ileum, liver, spleen, lung, kidney).
Specificity:	**Pig:** neutrophils
	Other: does not react with human neutrophils

For in vitro research only. This product contains Kathon™ CG as a preservative.

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