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Goat Anti-Lactoperoxidase Antibody

Peptide-affinity purified goat antibody

Catalog # AF1609a

Specification

Goat Anti-Lactoperoxidase Antibody - Product Information

Application	**WB**
Primary Accession	P22079
Other Accession	NP_006142, 4025
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**80288**

Goat Anti-Lactoperoxidase Antibody - Additional Information

Gene ID 4025

Other Names
Lactoperoxidase, LPO, 1.11.1.7, Salivary peroxidase, SPO, LPO, SAPX

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Lactoperoxidase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Lactoperoxidase Antibody - Protein Information

Name LPO (HGNC:6678)

Synonyms SAPX

Function
Heme-containing oxidoreductase which catalyzes the conversion of thiocyanate (SCN(-)) into antimicrobial agent hypothiocyanous acid (OSCN(-)) in the presence of hydrogen peroxide (H2O2) (By similarity). Also involved in the conversion of iodide (I(-)) into hypoiodite (IO(-)) in the presence of H2O2 (By similarity). Responsible for the inactivation of a wide range of micro-organisms and

hence, important component of defense mechanism (PubMed:12626341). Shows antibacterial properties against Pseudomonas aeruginosa (PubMed:12626341). The lactoperoxidase-SCN(-)-H2O2 system shows antibacterial properties against Burkholderia cepacia and Haemophilus influenzae in vitro (PubMed:12626341). Present in mammary and salivary gland secretions and may contribute to airway host defense against infection (PubMed:12626341). May contribute to maintaining an appropriate H2O2 cellular level, therefore protecting cells from H2O2-caused injuries and inflammation (By similarity).

Cellular Location
Secreted. Cytoplasm {ECO:0000250|UniProtKB:Q5SW46}

Tissue Location
Mammary gland, milk and salivary gland. Found in bronchial submucosal glands.

Goat Anti-Lactoperoxidase Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Lactoperoxidase Antibody - Images

AF1609a (0.01 µg/ml) staining of Human Lung lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Lactoperoxidase Antibody - Background

This gene encodes an oxidoreductase secreted from salivary, mammary, and other mucosal glands that functions as a natural antibacterial agent. Multiple transcript variants encoding different isoforms have been found for this gene.

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Polymorphisms in innate immunity genes and risk of childhood leukemia. Han S, et al. Hum Immunol, 2010 Jul. PMID 20438785.
Risk of meningioma and common variation in genes related to innate immunity. Rajaraman P, et al. Cancer Epidemiol Biomarkers Prev, 2010 May. PMID 20406964.
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