

# Ambp antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI11963

## Product Information

---

<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">Q64240</a>
<b>Other Accession</b>	<a href="#">NM_012901</a> , <a href="#">NP_037033</a>
<b>Reactivity</b>	Human, Mouse, Rat, Rabbit, Pig, Dog, Horse, Bovine
<b>Predicted</b>	Human, Mouse, Rat, Pig, Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	38851

## Additional Information

---

<b>Gene ID</b>	25377
<b>Alias Symbol</b>	Ambp
<b>Other Names</b>	Protein AMBP, Alpha-1-microglobulin, Inter-alpha-trypsin inhibitor light chain, ITI-LC, Bikunin, HI-30, Trypstatin, Ambp, Itil
<b>Format</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Reconstitution &amp; Storage</b>	Add 50 ul of distilled water. Final anti-Ambp antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
<b>Precautions</b>	Ambp antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

---

<b>Name</b>	Ambp
<b>Synonyms</b>	Itil
<b>Function</b>	[Alpha-1-microglobulin]: Antioxidant and tissue repair protein with reductase, heme-binding and radical-scavenging activities. Removes and protects against harmful oxidants and repairs macromolecules in intravascular and extravascular spaces and in intracellular compartments. Intravascularly, plays a regulatory role in red cell homeostasis by preventing heme- and reactive oxygen species- induced cell damage. Binds and degrades free heme to protect fetal and adult red blood cells from hemolysis. Reduces extracellular methemoglobin, a Fe <sup>3+</sup> (ferric) form of hemoglobin that cannot

bind oxygen, back to the Fe<sup>2+</sup> (ferrous) form deoxyhemoglobin, which has oxygen-carrying potential. Upon acute inflammation, inhibits oxidation of low-density lipoprotein particles by MPO and limits vascular damage. Extravascularly, protects from oxidation products formed on extracellular matrix structures and cell membranes. Catalyzes the reduction of carbonyl groups on oxidized collagen fibers and preserves cellular and extracellular matrix ultrastructures. Importantly, counteracts the oxidative damage at blood-placenta interface, preventing leakage of free fetal hemoglobin into the maternal circulation. Intracellularly, has a role in maintaining mitochondrial redox homeostasis. Bound to complex I of the respiratory chain of mitochondria, may scavenge free radicals and preserve mitochondrial ATP synthesis. Protects renal tubule epithelial cells from heme-induced oxidative damage to mitochondria. Reduces cytochrome c from Fe<sup>3+</sup> (ferric) to the Fe<sup>2+</sup> (ferrous) state through formation of superoxide anion radicals in the presence of ascorbate or NADH/NADPH electron donor cofactors, ascorbate being the preferred cofactor (By similarity). Has a chaperone role in facilitating the correct folding of bikunin in the endoplasmic reticulum compartment (By similarity).

## Cellular Location

[Alpha-1-microglobulin]: Secreted {ECO:0000250|UniProtKB:P02760}. Endoplasmic reticulum {ECO:0000250|UniProtKB:P02760}. Cytoplasm, cytosol {ECO:0000250|UniProtKB:P02760}. Cell membrane {ECO:0000250|UniProtKB:P02760}; Peripheral membrane protein {ECO:0000250|UniProtKB:P02760}. Nucleus membrane {ECO:0000250|UniProtKB:P02760}; Peripheral membrane protein {ECO:0000250|UniProtKB:P02760}. Mitochondrion inner membrane {ECO:0000250|UniProtKB:P02760}; Peripheral membrane protein {ECO:0000250|UniProtKB:P02760}. Secreted, extracellular space, extracellular matrix {ECO:0000250|UniProtKB:P02760}. Note=The cellular uptake occurs via a non-endocytotic pathway and allows for localization to various membrane structures. A specific binding to plasma membrane suggests the presence of a cell receptor, yet to be identified Directly binds collagen fibers type I. {ECO:0000250|UniProtKB:P02760}

## Tissue Location

Expressed by the liver and secreted in plasma.

## Images



WB Suggested Anti-Ambp Antibody Titration: 0.2-1 µg/ml  
ELISA Titer: 1:62500  
Positive Control: Rat Lung

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.