

**AMBP Rabbit mAb**  
Catalog # AP77747**Specification**

---

**AMBP Rabbit mAb - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P02760</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Monoclonal Antibody</b>
Calculated MW	<b>38999</b>

**AMBP Rabbit mAb - Additional Information**

Gene ID 259

**Other Names**

AMBP

**Dilution**

WB~~1/500-1/1000

**Format**

Liquid

**AMBP Rabbit mAb - Protein Information****Name** AMBP**Synonyms** HCP, ITIL**Function**

[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 (PubMed: [11877257](http://www.uniprot.org/citations/11877257), PubMed: [15683711](http://www.uniprot.org/citations/15683711), PubMed: [22096585](http://www.uniprot.org/citations/22096585), PubMed: [23157686](http://www.uniprot.org/citations/23157686), PubMed: [23642167](http://www.uniprot.org/citations/23642167), PubMed: [25698971](http://www.uniprot.org/citations/25698971), PubMed: [32092412](http://www.uniprot.org/citations/32092412), PubMed: [32823731](http://www.uniprot.org/citations/32823731)). 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 (PubMed: [11877257](http://www.uniprot.org/citations/11877257), PubMed: [32092412](http://www.uniprot.org/citations/32092412)). 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 (PubMed:<a href="http://www.uniprot.org/citations/15683711" target="\_blank">15683711</a>). Upon acute inflammation, inhibits oxidation of low-density lipoprotein particles by MPO and limits vascular damage (PubMed:<a href="http://www.uniprot.org/citations/25698971" target="\_blank">25698971</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/22096585" target="\_blank">22096585</a>, PubMed:<a href="http://www.uniprot.org/citations/23642167" target="\_blank">23642167</a>). Importantly, counteracts the oxidative damage at blood-placenta interface, preventing leakage of free fetal hemoglobin into the maternal circulation (PubMed:<a href="http://www.uniprot.org/citations/21356557" target="\_blank">21356557</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/23157686" target="\_blank">23157686</a>, PubMed:<a href="http://www.uniprot.org/citations/32823731" target="\_blank">32823731</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/15683711" target="\_blank">15683711</a>). Has a chaperone role in facilitating the correct folding of bikunin in the endoplasmic reticulum compartment (By similarity).

#### Cellular Location

[Alpha-1-microglobulin]: Secreted. Endoplasmic reticulum. Cytoplasm, cytosol. Cell membrane; Peripheral membrane protein. Nucleus membrane; Peripheral membrane protein. Mitochondrion inner membrane; Peripheral membrane protein. Secreted, extracellular space, extracellular matrix. 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.

#### Tissue Location

[Alpha-1-microglobulin]: Expressed by the liver and secreted in plasma. Occurs in many physiological fluids including plasma, urine, and cerebrospinal fluid (PubMed:11877257). Expressed in epidermal keratinocytes, in dermis and epidermal-dermal junction (at protein level) (PubMed:22096585). Expressed in red blood cells (at protein level) (PubMed:32092412). Expressed in placenta (PubMed:21356557).

#### AMBP Rabbit mAb - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### AMBP Rabbit mAb - Images



