

**AZU1 Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14972C****Specification**

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**AZU1 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P20160</a>
Other Accession	<a href="#">NP_001691.1</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	26886
Antigen Region	67-96

**AZU1 Antibody (Center) - Additional Information****Gene ID** 566**Other Names**

Azurocidin, Cationic antimicrobial protein CAP37, Heparin-binding protein, HBP, AZU1

**Target/Specificity**

This AZU1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 67-96 amino acids from the Central region of human AZU1.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

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

**Precautions**

AZU1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**AZU1 Antibody (Center) - Protein Information****Name** AZU1 ([HGNC:913](#))**Function** This is a neutrophil granule-derived antibacterial and monocyte- and fibroblast-specific

chemotactic glycoprotein. Binds heparin. The cytotoxic action is limited to many species of Gram-negative bacteria; this specificity may be explained by a strong affinity of the very basic N-terminal half for the negatively charged lipopolysaccharides that are unique to the Gram-negative bacterial outer envelope. It may play a role in mediating recruitment of monocytes in the second wave of inflammation. Has antibacterial activity against the Gram-negative bacterium *P.aeruginosa*, this activity is inhibited by LPS from *P.aeruginosa*. Acting alone, it does not have antimicrobial activity against the Gram-negative bacteria *A.actinomycetemcomitans* ATCC 29532, *A.actinomycetemcomitans* NCTC 9709, *A.actinomycetemcomitans* FDC-Y4, *H.aphrophilus* ATCC 13252, *E.corrodens* ATCC 23834, *C.sputigena* ATCC 33123, *Capnocytophaga* sp ATCC 33124, *Capnocytophaga* sp ATCC 27872 or *E.coli* ML-35. Has antibacterial activity against *C.sputigena* ATCC 33123 when acting synergistically with either elastase or cathepsin G.

#### Cellular Location

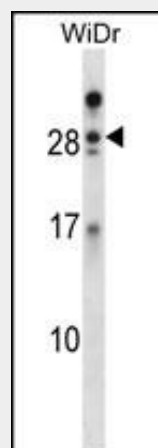
Cytoplasmic granule membrane; Peripheral membrane protein; Cytoplasmic side. Note=Localizes to azurophil granules of neutrophil granulocytes. Also called primary granules, these specialized lysosomes of the neutrophil formed early during promyelocyte development store antibacterial proteins and peptides

#### AZU1 Antibody (Center) - Protocols

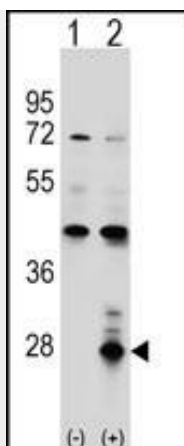
Provided below are standard protocols that you may find useful for product applications.

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

#### AZU1 Antibody (Center) - Images



AZU1 Antibody (Center) (Cat. #AP14972c) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the AZU1 antibody detected the AZU1 protein (arrow).



Western blot analysis of AZU1 (arrow) using rabbit polyclonal AZU1 Antibody (Center) (Cat. #AP14972c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the AZU1 gene.

#### **AZU1 Antibody (Center) - Background**

Azurophil granules, specialized lysosomes of the neutrophil, contain at least 10 proteins implicated in the killing of microorganisms. The protein encoded by this gene is an azurophil granule antibiotic protein, with monocyte chemotactic and antibacterial activity. It is also an important multifunctional inflammatory mediator. This encoded protein is a member of the serine protease gene family but it is not a serine proteinase, because the active site serine and histidine residues are replaced. The genes encoding this protein, neutrophil elastase 2, and proteinase 3 are in a cluster located at chromosome 19pter. All 3 genes are expressed coordinately and their protein products are packaged together into azurophil granules during neutrophil differentiation.

#### **AZU1 Antibody (Center) - References**

Changho, S., et al. Pathol. Res. Pract. 206(5):314-317(2010)  
Linder, A., et al. J. Invest. Dermatol. 130(5):1365-1372(2010)  
Segat, L., et al. Vaccine 28(10):2201-2206(2010)  
Wilker, E., et al. Environ. Health Perspect. 117(6):935-940(2009)  
Di Gennaro, A., et al. FASEB J. 23(6):1750-1757(2009)