

**AMID / PRG3 Antibody (N-Term)**  
Peptide-affinity purified goat antibody  
Catalog # AF2428a

### Specification

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#### AMID / PRG3 Antibody (N-Term) - Product Information

Application	E
Primary Accession	<a href="#">O9BRQ8</a>
Other Accession	<a href="#">NP_116186.1</a> , <a href="#">84883</a>
Predicted	Human
Host	Goat
Clonality	Polyclonal
Concentration	0.5 mg/ml
Isotype	IgG
Calculated MW	40527

#### AMID / PRG3 Antibody (N-Term) - Additional Information

Gene ID 84883

#### Other Names

Apoptosis-inducing factor 2, 1.-.-., Apoptosis-inducing factor homologous mitochondrion-associated inducer of death, Apoptosis-inducing factor-like mitochondrion-associated inducer of death, p53-responsive gene 3 protein, AIFM2, AMID, PRG3 {ECO:0000303|PubMed:12135761}

#### Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 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

AMID / PRG3 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

#### AMID / PRG3 Antibody (N-Term) - Protein Information

Name AIFM2 {ECO:0000303|PubMed:26689472, ECO:0000312|HGNC:HGNC:21411}

#### Function

A NAD(P)H-dependent oxidoreductase that acts as a key inhibitor of ferroptosis (PubMed:<a href="http://www.uniprot.org/citations/31634899" target="\_blank">31634899</a>, PubMed:<a href="http://www.uniprot.org/citations/31634900" target="\_blank">31634900</a>, PubMed:<a href="http://www.uniprot.org/citations/35922516" target="\_blank">35922516</a>). At the plasma membrane, catalyzes reduction of coenzyme Q/ubiquinone-10 to ubiquinol-10, a lipophilic

radical-trapping antioxidant that prevents lipid oxidative damage and consequently ferroptosis (PubMed:<a href="http://www.uniprot.org/citations/31634899" target="\_blank">31634899</a>, PubMed:<a href="http://www.uniprot.org/citations/31634900" target="\_blank">31634900</a>). Acts in parallel to GPX4 to suppress phospholipid peroxidation and ferroptosis (PubMed:<a href="http://www.uniprot.org/citations/31634899" target="\_blank">31634899</a>, PubMed:<a href="http://www.uniprot.org/citations/31634900" target="\_blank">31634900</a>). This anti-ferroptotic function is independent of cellular glutathione levels (PubMed:<a href="http://www.uniprot.org/citations/31634899" target="\_blank">31634899</a>, PubMed:<a href="http://www.uniprot.org/citations/31634900" target="\_blank">31634900</a>). Also acts as a potent radical-trapping antioxidant by mediating warfarin-resistant vitamin K reduction in the canonical vitamin K cycle: catalyzes NAD(P)H-dependent reduction of vitamin K (phylloquinone, menaquinone-4 and menadione) to hydroquinone forms (PubMed:<a href="http://www.uniprot.org/citations/35922516" target="\_blank">35922516</a>). Hydroquinones act as potent radical-trapping antioxidants inhibitor of phospholipid peroxidation and ferroptosis (PubMed:<a href="http://www.uniprot.org/citations/35922516" target="\_blank">35922516</a>). May play a role in mitochondrial stress signaling (PubMed:<a href="http://www.uniprot.org/citations/26689472" target="\_blank">26689472</a>). Upon oxidative stress, associates with the lipid peroxidation end product 4-hydroxy-2-nonenal (HNE) forming a lipid adduct devoid of oxidoreductase activity, which then translocates from mitochondria into the nucleus triggering DNA damage and cell death (PubMed:<a href="http://www.uniprot.org/citations/26689472" target="\_blank">26689472</a>). Capable of DNA binding in a non-sequence specific way (PubMed:<a href="http://www.uniprot.org/citations/15958387" target="\_blank">15958387</a>).

#### Cellular Location

Lipid droplet. Cell membrane; Lipid-anchor Cytoplasm. Mitochondrion membrane. Nucleus

#### Tissue Location

Detected in most normal tissues as two transcripts of 1.8 and 4.0 kb in length, respectively. Highly expressed in heart, moderately in liver and skeletal muscles, and expressed at low levels in placenta, lung, kidney, and pancreas. Both transcripts expressed following p53/TP53 induction. The shorter 1.8 kb transcript seems to be the major transcript in EB1 colon cancer cells

#### AMID / PRG3 Antibody (N-Term) - 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](#)

#### AMID / PRG3 Antibody (N-Term) - Images

#### AMID / PRG3 Antibody (N-Term) - References

A novel p53-inducible apoptogenic gene, PRG3, encodes a homologue of the apoptosis-inducing factor (AIF). Ohiro Y, Garkavtsev I, Kobayashi S, Sreekumar KR, Nantz R, Higashikubo BT, Duffy SL, Higashikubo R, Usheva A, Gius D, Kley N, Horikoshi N. FEBS Lett. 2002 Jul 31;524(1-3):163-71. PMID: 12135761