

**DATASHEET**

**UBA5 Rabbit Polyclonal Antibody**

CAT. NO. APA09582

**KEY FEATURES**

Target	UBA5	Source / Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey	Clonality	Polyclonal
Applications	WB, IHC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

**BACKGROUND**

E1-like enzyme which specifically catalyzes the first step in ufmylation . Activates UFM1 by first adenylating its C-terminal glycine residue with ATP, and thereafter linking this residue to the side chain of a cysteine residue in E1, yielding a UFM1-E1 thioester and free AMP . Activates UFM1 via a trans-binding mechanism, in which UFM1 interacts with distinct sites in both subunits of the UBA5 homodimer . Trans-binding also promotes stabilization of the UBA5 homodimer, and enhances ATP-binding . Transfer of UFM1 from UBA5 to the E2-like enzyme UFC1 also takes place using a trans mechanism . Ufmylation plays a key role in various processes, such as ribosome recycling, response to DNA damage, interferon response or reticulophagy (also called ER-phagy) .

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:200

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to UBA5
Specificity	Recognizes endogenous levels of UBA5 protein.
Antibody Type	Primary antibody
Immunogen	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human UBA5. The exact sequence is proprietary.
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 44 kD; Observed: 45 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	UBE1DC1; Ubiquitin-like modifier-activating enzyme 5; Ubiquitin-activating enzyme 5; ThiFP1; UFM1-activating enzyme; Ubiquitin-activating enzyme E1 domain-containing protein 1
Gene Symbol	UBA5
Entrez Gene	79876(Human); 66663(Mouse); 300968(Rat)
SwissProt	Q9GZZ9(Human); Q8VE47(Mouse); Q5M7A4(Rat)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

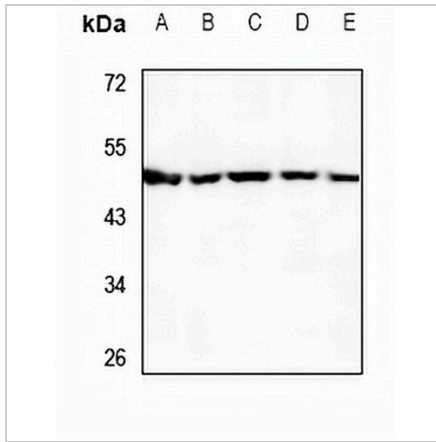
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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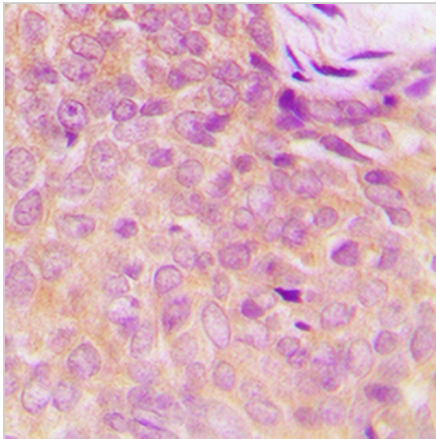
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**DATA**



Western blot analysis of UBA5 expression in C6 (A), CT26 (B), A549 (C), HepG2 (D), HCT116 (E) whole cell lysates. (Predicted band size: 44 kD; Observed band size: 45 kD)



Immunohistochemical analysis of UBA5 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.