


## Product datasheet

### Anti-AMSH antibody [EPR4361] ab108301

KO VALIDATED Recombinant RabMAb

4 Images

#### Overview

Product name	Anti-AMSH antibody [EPR4361]
Description	Rabbit monoclonal [EPR4361] to AMSH
Host species	Rabbit
Tested applications	<b>Suitable for:</b> WB
Species reactivity	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat cell lysate, HeLa cell lysate, HAP1 cell lysate, Raji cell lysate, SW480 cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	<p>pH: 7.20</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant</p>
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR4361
Isotype	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab108301 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Predicted molecular weight: 48 kDa.

## Target

### Function

Zinc metalloprotease that specifically cleaves 'Lys-63'-linked polyubiquitin chains. Does not cleave 'Lys-48'-linked polyubiquitin chains (By similarity). Functions at the endosome and is able to oppose the ubiquitin-dependent sorting of receptors to lysosomes. Plays a role in signal transduction for cell growth and MYC induction mediated by IL-2 and GM-CSF. Potentiates BMP (bone morphogenetic protein) signaling by antagonizing the inhibitory action of SMAD6 and SMAD7.

### Tissue specificity

Ubiquitously expressed.

### Sequence similarities

Belongs to the peptidase M67C family.  
Contains 1 MPN (JAB/Mov34) domain.

### Domain

The JAMM motif is essential for the protease activity.

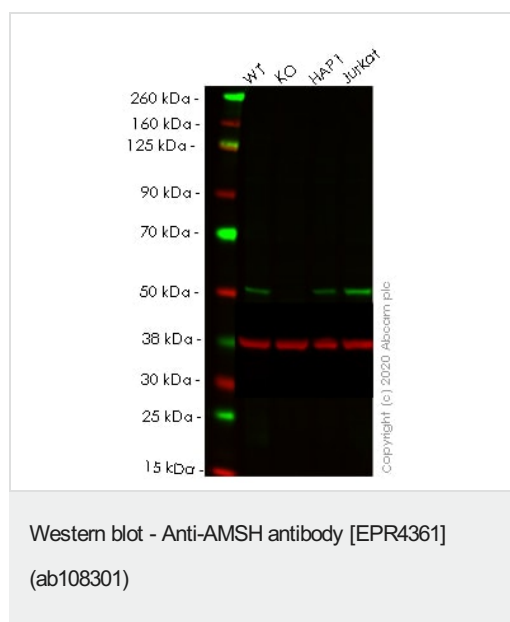
### Post-translational modifications

Phosphorylated after BMP type I receptor activation.  
Ubiquitinated by SMURF2 in the presence of RNF11.

### Cellular localization

Nucleus. Membrane. Cytoplasm. Early endosome.

## Images



**All lanes** : Anti-AMSH antibody [EPR4361] (ab108301) at 1/1000 dilution

**Lane 1** : Wild-type HeLa lysate

**Lane 2** : STAM Binding Protein knockout HeLa lysate

**Lane 3** : HAP1 lysate

**Lane 4** : Jurkat lysate

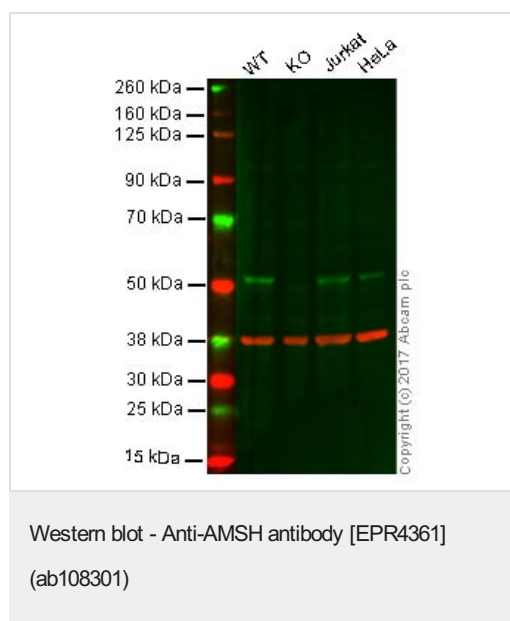
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 48 kDa

**Lanes 1-4:** Merged signal (red and green). Green - ab108301 observed at 48 kDa. Red - loading control **ab8245** observed at 37 kDa.

ab108301 Anti-STAMBP antibody was shown to specifically react with STAM Binding Protein in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab265249** (knockout cell lysate **ab258213**) was used. Wild-type and STAM Binding Protein knockout samples were subjected to SDS-PAGE. ab108301 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



**All lanes :** Anti-AMSH antibody [EPR4361] (ab108301) at 1/1000 dilution

**Lane 1 :** Wild-type HAP1 whole cell lysate

**Lane 2 :** AMSH knockout HAP1 whole cell lysate

**Lane 3 :** Jurkat whole cell lysate

**Lane 4 :** HeLa whole cell lysate

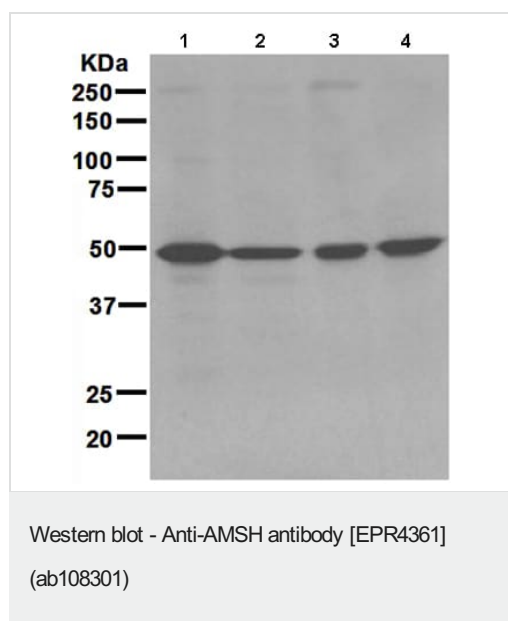
Lysates/proteins at 20 µg per lane.

**Predicted band size:** 48 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab108301 observed at 48 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab108301 was shown to specifically react with AMSH in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when AMSH knockout samples were examined. Wild-type and AMSH knockout samples were subjected to SDS-PAGE. Ab108301 and **ab9484** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed

**ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



**All lanes** : Anti-AMSH antibody [EPR4361] (ab108301) at 1/1000 dilution

**Lane 1** : Jurkat cell lysate

**Lane 2** : HeLa cell lysate

**Lane 3** : Raji cell lysate

**Lane 4** : SW480 cell lysate

Lysates/proteins at 10 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 48 kDa

Why choose a recombinant antibody?

**Research with confidence**  
Consistent and reproducible results

**Long-term and scalable supply**  
Recombinant technology

**Success from the first experiment**  
Confirmed specificity

**Ethical standards compliant**  
Animal-free production

Anti-AMSH antibody [EPR4361] (ab108301)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise,

please visit <https://www.abcam.com/abpromise> or contact our technical team.

#### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors