

**AHA2 Antibody**  
**Catalog # ASM10458****Specification**

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**AHA2 Antibody - Product Information**

Application	WB, ICC
Primary Accession	<a href="#">Q719I0</a>
Other Accession	<a href="#">NP_689605.1</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
<b>Description</b>	
Rabbit Anti-Human AHA2 Polyclonal	

**Target/Specificity**  
Cross reacts with Aha1.

**Other Names**  
ATPase hydrogen-exporting ATPase 2 Antibody

**Immunogen**  
Aha2

**Purification**  
Protein A Purified

Storage	-20°C
<b>Storage Buffer</b>	
PBS pH7.4, 50% glycerol, 0.09% sodium azide	

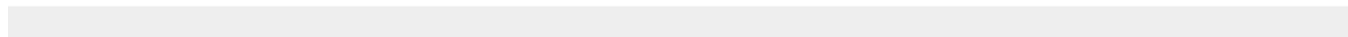
Shipping Temperature	Blue Ice or 4°C
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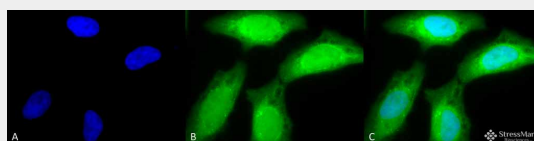
**Certificate of Analysis**  
1 µg/ml of SPC-196 was sufficient for detection of Aha2 in 20 µg of rat tissue lysate by colorimetric immunoblot analysis using Goat anti-rat IgG:HRP as the secondary antibody.

**AHA2 Antibody - Protocols**

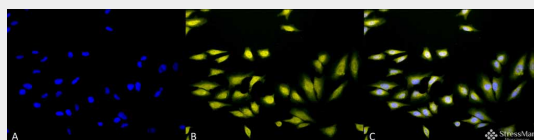
Provided below are standard protocols that you may find useful for product applications.

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

**AHA2 Antibody - Images**



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-AHA2 Polyclonal Antibody (ASM10458). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-AHA2 Polyclonal Antibody (ASM10458) at 1:80 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Nucleus. Cytoplasm. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-AHA2 Antibody. (C) Composite. Heat Shocked at 42°C for 1h.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-AHA2 Polyclonal Antibody (ASM10458). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-AHA2 Polyclonal Antibody (ASM10458) at 1:80 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rabbit (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Nucleus. Cytoplasm. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-AHA2 Antibody. (C) Composite. Heat Shocked at 42°C for 1h.

### AHA2 Antibody - Background

The Arabidopsis protein RIN4 is a well known regulator of plant immunity. The plasma membrane H<sup>+</sup>-ATPases Aha1 and Aha2 are one class of RIN4-associated proteins (1-5). Aha1 and Aha2 play a crucial role in resisting pathogen invasion- plants use RIN4 to regulate H<sup>+</sup>-ATPase activity during immune responses, thereby controlling stomatal apertures during pathogen attack (1). Wild type AHA2 has been found to be localized to the plasma membrane, and has also been found in the ER (4).

### AHA2 Antibody - References

1. Liu J., Elmore J.M., and Coaker G. (2009) Plant Signal Behav. 4(12): 1107-1110.
2. Harper J.F., Surowy T.K. and Sussman M.R. (1989) Proc Natl Acad. Sci USA . 86: 1234-1238.
3. Harper J. F., et al. (1990) J Biol Chem. 265: 13601-13608.
4. Harper J.F., Manney L., and Sussman M.R. (1994) Mol Gen Genet. 243: 572-587.
5. Regenberg B., Villalba J.M., Lanfermeijer F.C., and Palmgren M.G. (1995) Plant Cell. 7: 1655-1666.