

Product datasheet for TA319196

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com

OriGene Technologies, Inc.

EU: info-de@origene.com CN: techsupport@origene.cn

AHA1 (AHSA1) Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: WB

Recommended Dilution: ELISA: 1:35,000 - 1:185,000, WB: 1:500 - 1:3,000, IHC: User Optimized

Reactivity: Human, Chimpanzee

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated

immunizations with a synthetic peptide corresponding to an internal region of human AHA1

protein.

Formulation: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Concentration: lot specific

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: activator of Hsp90 ATPase activity 1

Database Link: NP 036243

Entrez Gene 10598 Human

095433

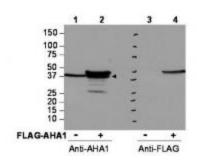
Synonyms: AHA1; C14orf3; p38



Note:

This antibody is suitable for Cancer, Immunology and Nuclear Signaling research. Activator of Hsp90 ATPase (AHA1) stimulates the inherent ATPase cycle of Hsp90, which is essential for its chaperone activity in vivo. The activation and/or stability of many of the key regulatory and signaling proteins of the eukaryotic cell depend on their interaction with the Hsp90 molecular chaperone. Hsp90 is assisted and regulated by co-chaperones that participate in an ordered series both to assist client-protein recruitment or release and to modulate progress through the ATPase coupled chaperone cycle. Structural analysis and mutagenesis show that binding of the N-terminal domain of AHA1 to Hsp90 promotes a conformational switch in the middle-segment catalytic loop (aa 370–390) of Hsp90 that exposes the catalytic Arg380 and enables its interaction with ATP in the N-terminal nucleotide-binding domain of the chaperone. Recent studies show that AHA1 modulates Hsp90-dependent stability of the folding of the cystic fibrosis transmembrane conductance regulator (CFTR) in the endoplasmic reticulum (ER). Down-regulation of AHA1 rescues misfolding of CFTR in cystic fibrosis.

Product images:



WB using Anti-AHA1 antibody shows detection of AHA1 in Cos7 cells. For Lanes 2 and 4, Cos7 cells were transfected with pcDNA3-FLAG-AHA1. For Lanes 1 and 3, Cos7 cells were not transfected. Extracts (40 ug per lane) were electrophoresed and transferred to nitrocellulose. The membrane was probed with anti-AHA1 (lanes 1 and 2, 1:2,000 dilution) or anti-FLAG (lanes 3 and 4). The lower band seen in anti-AHA1 blotting (arrowhead) is endogenous AHA1.