

AHSA1 Antibody

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rev. 06/29/16

For Research Use Only. Not For Use In Diagnostic Procedures.

Entrez Gene ID #10598
UniProt ID #095433

Applications W Endogenous	Species Cross-Reactivity* H, M, R, Mk	Molecular Wt. 42 kDa	Source Rabbit**
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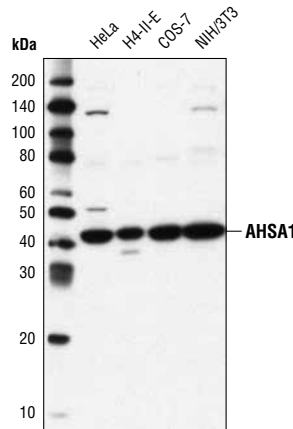
Background: Activator of 90 kDa heat shock protein ATPase homolog 1 (AHSA1 or AHA1) is a 42 kDa HSP90 co-chaperone that stimulates intrinsic HSP90 ATPase activity in eukaryotic cells to facilitate client protein folding and activation (1,2). Initially, HSP90 forms a ternary complex with a nascent client protein such as v-Src, c-Raf or CFTR, and the co-chaperone protein CDC37 (3,4). HSP90 then cycles through a series of conformational changes facilitated by ATP that results in the release of CDC37 and recruitment of AHSA1 - a process that is dependent on tyrosine phosphorylation of HSP90 and CDC37 (5). More recently, AHSA1 has been shown to have unique interactions with additional client proteins involved in RNA splicing and DNA repair, suggesting that AHSA1 may have also have a scaffolding role in recruiting client proteins to HSP90 (6).

Specificity/Sensitivity: AHSA1 Antibody recognizes endogenous levels of total AHSA1 protein.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu242 of human AHSA1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Panaretou, B. et al. (2002) *Mol Cell* 10, 1307-18.
- (2) Lotz, G.P. et al. (2003) *J Biol Chem* 278, 17228-35.
- (3) Holmes, J.L. et al. (2008) *Cancer Res* 68, 1188-97.
- (4) Koulov, A.V. et al. (2010) *Mol Biol Cell* 21, 871-84.
- (5) Xu, W. et al. (2012) *Mol Cell* 47, 434-43.
- (6) Sun, L. et al. (2012) *Biochim Biophys Acta* 1823, 1092-101.



Western blot analysis of extracts from various cell lines using AHSA1 Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

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Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
 Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.