

Store at  
-20C  
#12841**AHSA1 Antibody**

**Orders:** 877-616-CELL (2355)  
orders@cellsignal.com

**Support:** 877-678-TECH (8324)

**Web:** info@cellsignal.com  
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	42	Rabbit	#O95433	10598

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**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.

**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**

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).

**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.

**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

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

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

**Trademarks and Patents**

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit [cellsignal.com/trademarks](http://cellsignal.com/trademarks) for more information.

**Limited Uses**

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in

any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.