

#4870 Store at **-20°C**

HSP60 (D307) Antibody



Orders ■ 877-616-CELL (2355)
 orders@cellsignal.com
Support ■ 877-678-TECH (8324)
 info@cellsignal.com
Web ■ www.cellsignal.com

rev. 01/25/16

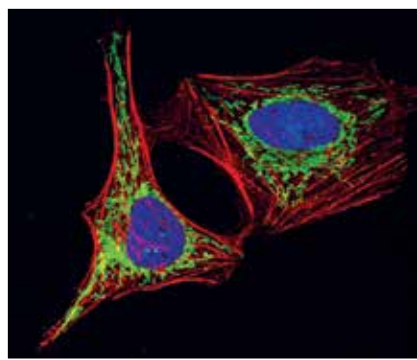
For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-IC, F Endogenous	H, M, R, Mk, Dm	60 kDa	Rabbit**

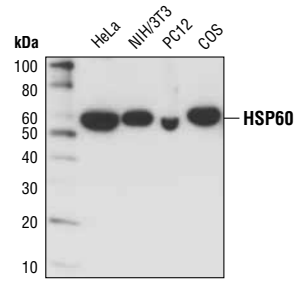
Background: In both prokaryotic and eukaryotic cells the misfolding and aggregation of proteins during biogenesis and under conditions of cellular stress are prevented by molecular chaperones (1-3). HSP60 has primarily been known as a mitochondrial protein that is important for folding key proteins after import into the mitochondria (4). It is now clear that a significant amount of HSP60 is also present in the cytosol of many cells and that it is induced by stress, inflammatory and immune responses, autoantibodies correlated with Alzheimer's, coronary artery diseases, MS, and diabetes (5-8).

Specificity/Sensitivity: HSP60 (D307) Antibody detects endogenous levels of total HSP60 protein. This antibody does not cross-react with other HSPs.

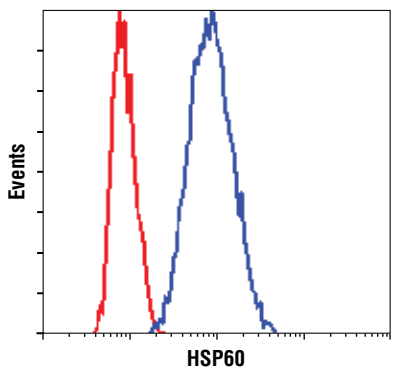
Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide surrounding Asp307 of human HSP60. Antibodies are purified by protein A and peptide affinity chromatography.



Confocal immunofluorescent analysis of HeLa cells using HSP60 (D307) Antibody (green). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red). Blue pseudo-color = DRAQ5® #4084 (fluorescent DNA dye).



Western blot analysis of extracts from various cell types using HSP60 (D307) Antibody.



Flow cytometric analysis of HeLa cells using HSP60 (D307) Antibody (blue) compared to a nonspecific negative control antibody (red).

Entrez-Gene ID #3329
UniProt ID #P10809

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
Immunofluorescence (IF-IC)	1:50
Flow Cytometry	1:50

For application 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.

Background References:

- (1) Hartl, F.U. (1996) *Nature* 381, 571-579.
- (2) Bukau, B. and Horwich, A.L. (1998) *Cell* 92, 351-366.
- (3) Hartl, F.U. and Hayer-Hartl, M. (2002) *Science* 295, 1852-1858.
- (4) Jindal, S. et al. (1989) *Mol. Cell Biol.* 9, 2279-2283.
- (5) Itoh, H. et al. (2002) *Eur. J. Biochem.* 269, 5931-5938.
- (6) Gupta, S. and Knowlton, A.A. *J. Cell Mol. Med.* 9, 51-58.
- (7) Deocaris, C.C. et al. (2006) *Cell Stress Chaperones* 11, 116-128.
- (8) Lai, H.C. et al. (2007) *Am J Physiol Endocrinol Metab* 292, E292-E297.

Alexa Fluor® is a registered trademark of Molecular Probes, Inc.

DRAQ5® is a registered trademark of Biostatus Limited.

Tween®20 is a registered trademark of ICI Americas, Inc.

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.

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.