Store at -20C

#4869

HSP60 (D85) Antibody

Cell Signaling TECHNOLOGY®

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.

Swiss-Prot Acc. #P10809

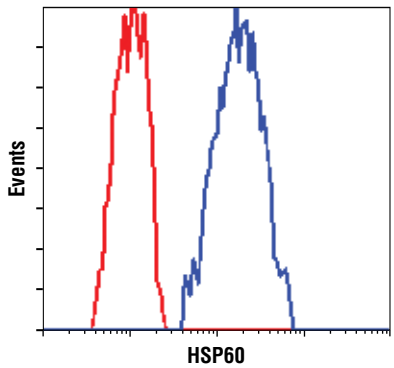
Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W, IF-IC, F Endogenous	H, M, R, Mk, Dr	60 kDa	Rabbit**

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).

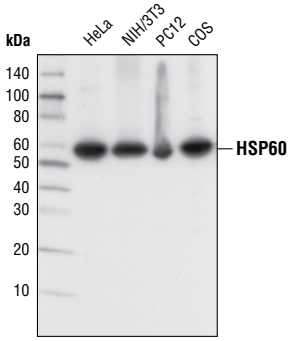
Specificity/Sensitivity: HSP60 (D85) Antibody detects endogenous levels of total HSP60 protein. This antibody does not cross-react with other HSPs.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide surrounding Asp85 of human HSP60. Antibodies are purified by protein A and peptide affinity chromatography.

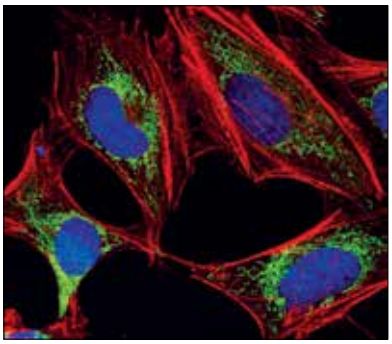
.



Flow cytometric analysis of untreated HeLa cells using HSP60 (D85) Antibody (blue) compared to a nonspecific negative control antibody (red).



Western blot analysis of extracts from HeLa, NIH/3T3, PC12 and COS cells using HSP60 (D85) Antibody.



Confocal immunofluorescent analysis of HeLa cells using HSP60 (D85) Antibody (green). Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

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)	1:100
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

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.