## HSP60 (D6F1) XP® Rabbit mAb Image: Cell Signaling tell (2355) orders@cellsignal.com Orders: 877-616-CELL (2355) orders@cellsignal.com Support: 877-678-TECH (8324) Web: info@cellsignal.com Cell Signal.com 3 Trask Lane | Danvers | Massachusetts | 01923 | USA

| Applications:         Reactivity:           W, IHC-P, IF-IC, FC-         H M R Hm Mk X Z B           FP         Pg | <b>Sensitivity:</b><br>Endogenous   | <b>MW (kDa):</b><br>60 | <b>Source/Isotype:</b><br>Rabbit IgG | <b>UniProt ID:</b><br>#P10809   | Entrez-Gene Id:<br>3329 |
|--|---|------------------------|--------------------------------------|---|-------------------------|
| Product Usage<br>Information   | <b>Application</b><br>Western Blotting<br>Immunohistochemistry (Paraffin)<br>Immunofluorescence (Immunocytochemistry)<br>Flow Cytometry (Fixed/Permeabilized)   |                        |                                      | <b>Dilution</b><br>1:1000<br>1:200 - 1:800<br>1:400 - 1:1600<br>1:200 - 1:800 |                         |
| Storage  | Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.<br>For a carrier free (BSA and azide free) version of this product see product #56658.   |                        |                                      |   |                         |
| Specificity/Sensitivity  | HSP60 (D6F1) XP <sup>®</sup> Rabbit mAb recognizes endogenous levels of total HSP60 protein.  |                        |                                      |   |                         |
| Species predicted to react<br>based on 100% sequence<br>homology   | Chicken, Dog, Horse   |                        |                                      |   |                         |
| Source / Purification  | Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Trp68 of human HSP60 protein.  |                        |                                      |   |                         |
| Background   | In both prokaryotic and eukaryotic cells the misfolding and aggregation of proteins during biogenesis<br>and under conditions of cellular stress are prevented by molecular chaperones (1-3). HSP60 has<br>primarily been known as a mitochondrial protein that is important for folding key proteins after import<br>into the mitochondria (4). Research studies have shown that a significant amount of HSP60 is also<br>present in the cytosol of many cells, and that it is induced by stress, inflammatory and immune<br>responses, and autoantibodies correlated with Alzheimer's, coronary artery diseases, MS, and diabetes<br>(5-8). |                        |                                      |   |                         |
| Background References  | <ol> <li>Hartl, F.U. (1996) Nature 381, 571-579.</li> <li>Bukau, B. and Horwich, A.L. (1998) Cell 92, 351-366.</li> <li>Hartl, F.U. and Hayer-Hartl, M. (2002) Science 295, 1852-1858.</li> <li>Jindal, S. et al. (1989) Mol. Cell Biol. 9, 2279-2283.</li> <li>Itoh, H. et al. (2002) Eur. J. Biochem. 269, 5931-5938.</li> <li>Gupta, S. and Knowlton, A.A. J. Cell Mol. Med. 9, 51-58.</li> <li>Deocaris, C.C. et al. (2006) Cell Stress Chaperones 11, 116-128.</li> <li>Lai, H.C. et al. (2007) Am. J. Physiol. Endocrinol. Metab. 292, E292-E297.</li> </ol>  |                        |                                      |   |                         |
| Species Reactivity   | Species reactivity is d   | letermined by testin   | g in at least one approve            | d application (e.g.,  | western blot).          |
| Western Blot Buffer  | IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X<br>TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.   |                        |                                      |   |                         |
| Applications Key   | <b>W:</b> Western Blotting <b>IHC-P:</b> Immunohistochemistry (Paraffin) <b>IF-IC:</b> Immunofluorescence (Immunocytochemistry) <b>FC-FP:</b> Flow Cytometry (Fixed/Permeabilized)  |                        |                                      |   |                         |
| Cross-Reactivity Key   | H: Human M: Mouse R: Rat Hm: Hamster Mk: Monkey X: Xenopus Z: Zebrafish B: Bovine Pg: Pig   |                        |                                      |   |                         |
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|  | Alexa Fluor is a regist   | tered trademark of L   | ife Technologies Corpor              | ation.  |                         |

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