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HSP60 (D6F1) XP® Rabbit mAb**Cell Signaling**
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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IHC-P, IF-IC, FC-FP	H M R Hm Mk X Z B Pg	Endogenous	60	Rabbit IgG	#P10809	3329

Product Usage Information**Application**

Western Blotting
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)
Flow Cytometry (Fixed/Permeabilized)

Dilution

1:1000
1:200 - 1:800
1:400 - 1:1600
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.

For a carrier free (BSA and azide free) version of this product see product #56658.

Specificity / Sensitivity

HSP60 (D6F1) XP® Rabbit mAb recognizes endogenous levels of total HSP60 protein.

Species predicted to react based on 100% sequence 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 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). Research studies have shown 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, and autoantibodies correlated with Alzheimer's, coronary artery diseases, MS, and diabetes (5-8).

Background References

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

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

WB: Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)
IF-IC: Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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