Lot # XXXXX

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MATERIAL DATA SHEET

Anti-HSP40/DNAJB1 Monoclonal Antibody
Cat. # A-410

Heat shock protein 40 kDa (HSP40) is the human homologue of the bacterial DnaJ heat shock protein. HSP40, also known as HSPF1 and DnaJ Homolog subfamily B member 1 (DNAJB1), is a 340 amino acid, 40 kDa member of the heat shock protein family. Heat shock proteins (HSPs) are a highly conserved family of stress response proteins. HSPs function primarily as molecular chaperones, facilitating the folding of other cellular proteins, preventing protein aggregation, or targeting improperly folded proteins to specific degradative pathways. HSP40 is a stress inducible chaperone that co-localizes with HSP70 and can bind unfolded proteins and prevent protein denaturation and aggregation. The conserved amino terminal J domain can interact with HSP70 and stimulate its ATPase activity.

Product Information	
Quantity:	50 µg
Source:	Protein A or G purified monoclonal mouse IgG_{2B} Clone # 419401
Antigen:	Purified, recombinant human HSP40 protein, Accession Number P25685
Stock:	0.5 mg/mL in PBS, pH 7.4, 50% glycerol, 0.09% sodium azide

Use & Storage	
Use:	Recommended concentration for Western blot analysis is 0.5 µg/mL. Detects human, mouse and rat HSP40.
Storage:	Store at -20°C.

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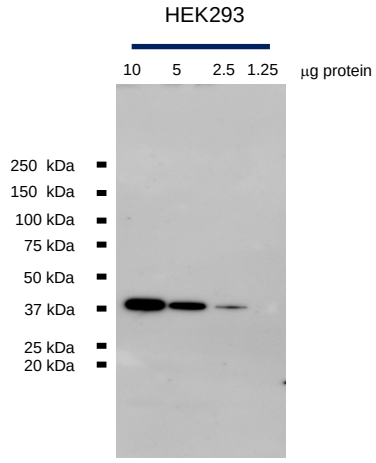
Sample Western Blot Data



NP40-soluble proteins from human embryonic kidney (HEK) cells were diluted in reducing SDS-PAGE Sample Buffer prior to separation on 4-20% gradient gels. Western blots utilizing PVDF membranes were developed using anti-HSP40 (A-410 antibody) at 0.2 µg/ml and HRP-labeled anti-mouse (R&D Systems # HAF007) secondary at 1:2000 dilution. A single band of appropriate size was detected in the HEK293 cell extract.

Literature

References:

Chien V., *et. al.* (2010) Biochem. J. **432:** 113-121
Hinault M.P., *et. al.* (2010) J Biol. Chem. **285:** 38173-38182
Minami Y., *et. al.* (1996) J Biol. Chem. **271:** 19617-19624
Qiu X.B., *et. al.* (2006) Cell Mol. Life. Sci. **63:** 2560-2570

For Laboratory Research Use Only, Not For Use in Humans

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