HSP40/Hdj2 (human), (recombinant)

Recombinant human HSP40/Hdj2 that acts as a co-chaperone to HSP70, supporting protein folding and maturation.

Hdj2 is an approximately 40 kDa member of the heat shock protein (HSP40) family, a eukaryotic homolog of the *E. coli* DnaJ protein. Eukaryotic DnaJ-like proteins share structural domain conservation with DnaJ, namely: 1) an N-terminal ~70 amino acid J domain, 2) a glycine- and phenylalanine-rich domain, 3) a cysteine-rich zinc finger domain, and 4) a poorly conserved C-terminal domain. The human constitutive Hdj2 protein shares full domain conservation with DnaJ, as opposed to the human inducible Hdj1 which lacks the zinc-finger domain. The HSP40 J domain regulates its interaction with HSP70 (*E. coli* DnaK), increasing HSP70 ATPase activity and in turn enhancing substrate binding by the HSP70 chaperone. HSP40 co-chaperones are involved in nearly all aspects of protein synthesis and secretion because of their importance in HSP70 function, and they are also thought to have an intrinsic ability to bind and fold some misfolded proteins. Hdj2 has been specifically shown to interact with Hsc70, the constitutive form of HSP70, in the biogenesis of the cystic fibrosis transmembrane conductance regulator (CFTR), mutations of which are known to cause inherited cystic fibrosis.

Citations: 4 View Online »

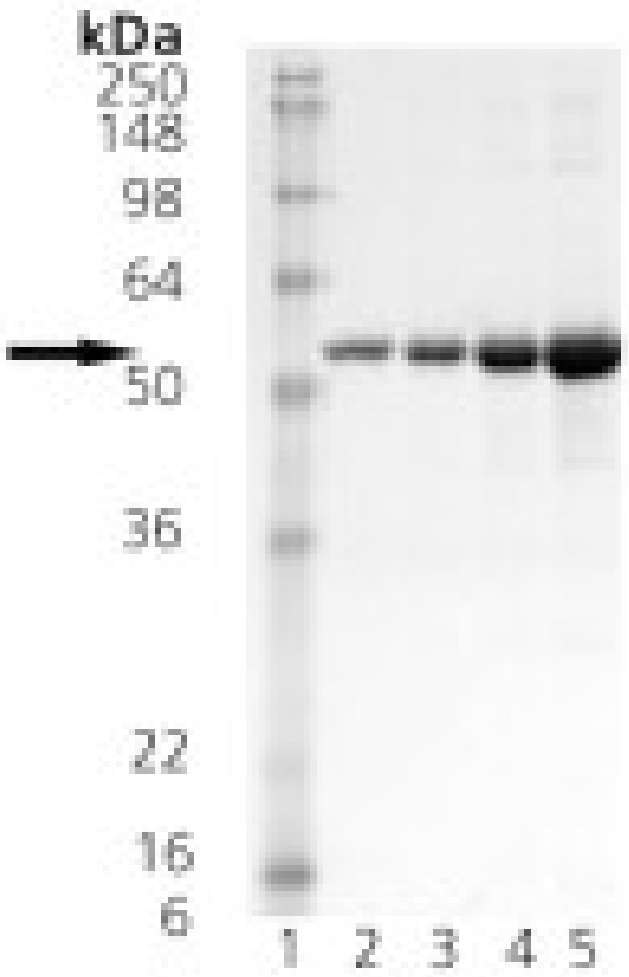
Ordering Information

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ADI-SPP-405-D	50µg
ADI-SPP-405-F	200µg

Manuals, SDS & CofA

View Online »



SDS-PAGE analysis of HSP40/Hdj2 (human), (recombinant) (Prod. No. ADI-SPP-405): Lane 1: MWM, Lane 2: 0.5µg, Lane 3: 1µg, Lane 4: 2µg, Lane 5: 5µg.



Western Blot analysis: Lane 1: MW marker, Lane 2: Hdj2 probed with anti-Hdj2 mAb.

Handling & Storage

Long Term Storage	-80°C
Shipping	Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name	Heat shock protein 40, DnaJ protein homolog 2
Application Notes	Western blot control.
Formulation	Liquid. In TBS containing 1mM DTT.
MW	~54kDa
Purity	≥90% (SDS-PAGE; Western blot)
Purity Detail	Purified by multi-step chromatography.
Source	Produced in *E. coli*.
UniProt ID	P31689

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