

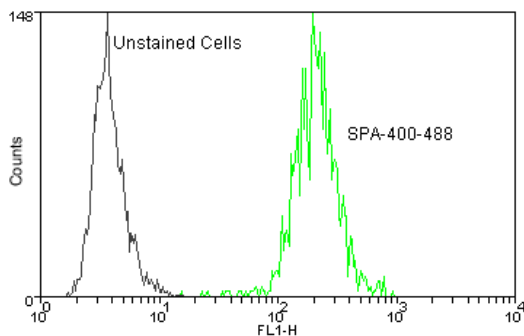
# Hsp40 (Hdj1) Polyclonal Antibody, DyLight™ 488 Conjugate

**New Conjugate Forms  
Now Available !  
DyLight™ 488 & PE**

## Product Specifications

<b>Catalog Number:</b>	SPA-400-488
<b>Host:</b>	Rabbit
<b>Species Reactivity:</b>	Human, monkey, mouse, rat, hamster, guinea pig, rabbit, dog, cow, sheep, pig, chicken, mussel, scallop, beluga, <i>Xenopus</i> , fish Other species not tested.
<b>Applications:</b> <i>The optimal dilution for a specific application must be determined by the investigator</i>	Flow Cytometry: 1:20 Other applications not tested.
<b>Predicted m.w.:</b>	~40 kDa
<b>Concentration:</b>	See product label
<b>Purification:</b>	Protein A Affinity
<b>Format:</b>	PBS, pH 7.2, 0.09% azide
<b>Storage:</b> <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
<b>Immunogen:</b>	Recombinant human Hsp40 protein
<b>Related Products:</b>	
SPP-400	Hsp40 (Hdj1) Recombinant Protein
LYC-HL101	HeLa Cell Lysate (Heat Shocked)
SAB-300	Goat anti-Rabbit IgG Polyclonal Antibody, HRP Conjugate
SPA-400	Hsp40 (Hdj1) Polyclonal Antibody
<b>NEW!</b> SPA-400PE	Hsp40 (Hdj1) Polyclonal Antibody, PE Conjugate
SPA-450	Hsp40 (Hdj1) Monoclonal Antibody (2E1)

DyLight™ is a trademark of Thermo Fisher Scientific, Inc. and its subsidiaries.



Flow cytometry analysis of  $10^6$  Jurkat cells using Hsp40 Monoclonal Antibody (Hdj1), DyLight™ 488 Conjugate at a concentration of 50  $\mu$ g/mL.

## Background:

Hsp40, also known as Hdj1<sup>1</sup>, is a basic mammalian 40kDa heat shock protein homologous to the bacterial heat shock protein, DnaJ and yeast DnaJ-related proteins such as SCJ1, Sec63/Npl1, YDJ1 and SIS1<sup>2-5</sup>. Like many heat shock proteins, Hsp40 is inducible by heat, transient metals and azetidine carboxylic acid in mammalian and avian cells<sup>3</sup>. In heat shocked HeLa cells, Hsp40 translocates rapidly from the cytoplasm to the nucleus and nucleoli in an intracellular pattern similar to Hsc70/Hsp70, the mammalian homologues of bacterial heat shock protein DnaK<sup>2</sup>. This suggests that Hsp40 and Hsp70 colocalize and repair denatured proteins in the nuclei and nucleoli of heat shocked cells<sup>2</sup>, resembling the collaboration of bacterial DnaJ and DnaK in dissociating the bacteriophage lambda protein complexes<sup>6,7</sup> and monomerizing the Rep A dimer<sup>8</sup>.

### References:

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