

BACKGROUND

Hsp70-interacting protein, Hip is one of several cochaperones that regulate activities of the Hsp70 chaperone family. Hip functions to stabilize Hsp70 in an adenosine 5'-diphosphate (ADP)-bound conformation that appears to prolong its interaction with substrate. Hsp70 cycles between 2 conformations in its role as a chaperone, an adenosine triphosphate (ATP)-bound form with low affinity for substrate and an ADP-bound form with high affinity for substrate.¹ Hip-Hsp70 interaction within multichaperone complexes involved in progesterone receptor assembly in mammals has been extensively examined. Hip associates transiently with Hsp70 and the progesterone receptor at an intermediate stage in assembly of the functional receptor complex, and Hip-Hsp70 association stabilizes the receptor in a conformation that prevents premature interaction with hormone in the cytosol. Before dissociating from the complex, Hip and Hsp70 also promote association of the cochaperone Hop along with Hsp90 and other proteins with the progesterone receptor to form the mature, hormone-receptive complex.^{2,3}

References:

1. Webb, M.A. et. Al: Cell Stress Chaperones 6: 247, 2001.
2. Smith, D. F. et al: Cell Dev. Biol. 11:45, 2000.
3. Kanelakis, K. C. et. Al: Biochemistry 39:14317, 2000.

TECHNICAL INFORMATION

Source:

Anti-HIP is a mouse monoclonal antibody raised against *E. coli*-expressed recombinant human Hip proteins.

Specificity and Sensitivity:

This antibody detects endogenous human Hip proteins without cross-reactivity with other family members.

Storage Buffer: PBS and 30% glycerol

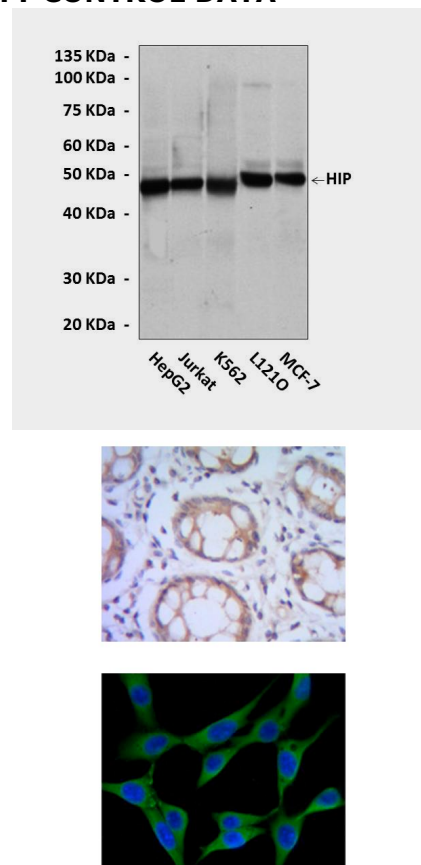
Storage:

Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	n/d
IHC	n/d
ICC	n/d
FACS	n/d
*Optimal dilutions must be determined by end user.	

QUALITY CONTROL DATA



Top: Specific detection of Hip proteins from various cell lines in Western blot analysis using Hip mouse monoclonal Antibody. **Middle:** This antibody stains paraffin-embedded human colon cancer tissue in immunohistochemical analysis. **Bottom:** It also stains NIH3T3 cells in confocal immunofluorescent testing (Hip Antibody: green; DRAQ5 DNA dye: Blue).

