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Product Information

Anti-CHIP

produced in rabbit, affinity isolated antibody

Product Number **C5617**

Product Description

Anti-CHIP is produced in rabbit using as immunogen a synthetic peptide V(218)DEKRKKRDIPDYLC(232) corresponding to amino acid residues 218-232 from human CHIP (carboxyl terminus of hsc70-interacting protein). The antibody was affinity isolated on immobilized immunogen.

Anti-CHIP (carboxyl terminus of hsc70-interacting protein) specifically recognizes human CHIP by immunoblotting (35 kDa) using transfected cells. The antibody may also detect a non-specific band at ~ 85 kDa. The antibody was not tested in other species.

CHIP (carboxyl terminus of hsc70-interacting protein) interacts with the constitutive form of hsc70 and the stress inducible form of hsp70. CHIP, a novel 35 kDa cytoplasmic protein, is highly conserved across species and is expressed preferentially in striated muscle *in vivo* and brain.¹ This protein is expressed in a broad range of cultured tissues. In immunoprecipitation, CHIP directly binds to the carboxyl terminus of hsc70 and hsp70 where it decreases ATPase activity and reduces overall chaperone efficiency.¹ CHIP has an important role in the ubiquitin-proteasome system. CHIP contains an U-box domain and acts as an E3 ubiquitin-ligase in conjunction with hsc70 and hsp90.²

Reagent

The antibody is provided as 100 µg of affinity purified IgG (1 mg/mL) in phosphate buffered saline containing 1 mg/mL bovine serum albumin and 0.05% sodium azide.

Precautions and Disclaimer

Due to the sodium azide content a material safety sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

Store at -20 °C. For extended storage, freeze in working aliquots. Avoid repeated freezing and thawing. Storage in "frost-free" freezers is not recommended. Centrifuge before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

By immunoblotting, a working antibody concentration of ~ 1 µg/mL is recommended using COS-1 cells overexpressing the human gene.

Note: In order to obtain the best results and assay sensitivity in various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Ballinger, C.A., et al., Identification of CHIP, a novel tetratricopeptide repeat-containing protein that interacts with heat shock proteins and negatively regulates chaperone functions. *Mol. Cell Biol.*, **19**, 4535-4545 (1999).
2. Murata, S., et al., CHIP is a chaperone-dependent E3 ligase that ubiquitylates unfolded protein. *EMBO Rep.*, **2**, 1133-1138 (2001).

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