

beta-Actin, (cytoplasmic 1) (NT). Rabbit Antigen Immunoaffinity Purified Polyclonal

**BACKGROUND**

Actins are highly conserved proteins that are involved in cell motility, structure and integrity, processes that are crucial for tissue development and the development of organism. The actin cytoskeleton is one of the principal drivers of cell motility and is capable of responding to complex signaling cascades. Recent evidence suggests that it may play key roles in regulating apoptosis and aging. Beta actin is one of six different actin isoforms which have been identified. Like GAPDH, b-actin is constitutively expressed at high levels in almost all tissues and cell lines making it ideal for use as a loading control marker in immunoblots.

**ORDERING INFORMATION**

**CATALOG NUMBER**  
X2742P

**SIZE**  
100  $\mu$ g

**FORM**  
Affinity Purified

**HOST/CLONE**  
Rabbit

**FORMULATION**  
Provided as solution in phosphate buffered saline with 0.08% sodium azide

**CONCENTRATION**  
See vial for concentration

**ISOTYPE**  
Ig

**APPLICATIONS**  
Western blot, Immunohistochemistry

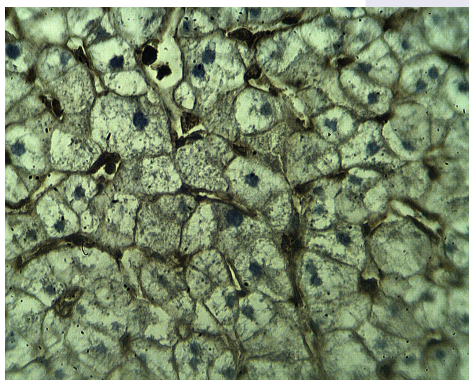
**SPECIES REACTIVITY**  
Human

**ACCESSION NUMBER**  
Human P60709

**IMMUNOGEN**

Synthetic peptide derived from the N-terminal of the beta-actin protein.

Immunohistochemistry image using beta-Actin (NT) antibody (Cat. No. X2742P) on normal human liver tissue sections at 10  $\mu$ g/ml.



**POSITIVE CONTROL/TISSUE EXPRESSION**

Human liver tissue

**COMMENTS**

Antibody can be used for Western blotting (1-5  $\mu$ g/ml) and immunohistochemistry on paraffin-embedded tissues (10  $\mu$ g/ml), Optimal concentration should be evaluated by serial dilutions.

**PURIFICATION**

Antigen Immunoaffinity Purification

**SHIP CONDITIONS**

Ship at ambient temperature, freeze upon arrival

**STORAGE CUSTOMER**

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**REFERENCES**

1. Ponte P., Ng S.Y., Engel J., Gunning P., Kedes L., Evolutionary conservation in the untranslated regions of actin mRNAs: DNA sequence of a human beta-actin cDNA. Nucleic Acids Res. 12:1687-1696(1984)
2. Nakajima-Iijima S., Hamada H., Reddy P., Kakunaga T., Molecular structure of the human cytoplasmic beta-actin gene: interspecies homology of sequences in the introns. Proc. Natl. Acad. Sci. U.S.A. 82:6133-6137(1985)
3. Procaccio V., Salazar G., Ono S., Styers M.L., Gearing M., Davila A., Jimenez R., Juncos J., Gutekunst C.-A., Meroni G., Fontanella B., Sontag E., Sontag J.-M., Faundez V., Wainer B.H. A mutation of beta -actin that alters depolymerization dynamics is associated with autosomal dominant developmental malformations, deafness, and dystonia. Am. J. Hum. Genet. 78:947-960(2006) [PubMed: 16685646] [Abstract]

**PRODUCT SPECIFIC REFERENCES**