



Polyclonal Anti- Actin (Sepharose Bead Conjugate)

Catalogue No. PA1324-S

Lot No. 0131012022464

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, rat. No cross reactivity with other proteins.

Recommended application

(Immunoprecipitation(IP)

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminal of human Actin (367-377aa), identical to the related rat sequence.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN₃a₃ preservative.

Storage

Store at 4°C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful for immunoprecipitation assays

BACKGROUND

Actin, a highly conserved protein, is a major component of both the cytoskeletal and contractile structures in the cell types. It varies in amount, being related to the type of differentiation and to the functional state of cells and tissues. The actins exhibit over 90% sequence homology, but each isoform has a unique NH2-terminal sequence. The isoforms are comprised of three alpha-actin, one beta-actin, two gamma-actin. Because the amino acid sequence of the C-terminal is the same for almost all actins, this antibody has been raised using a synthetic peptide corresponding to the C-terminal 11 residues.

REFERENCE

1.Gunning,P., Ponte,P., Okayama,H., Engel,J., Blau,H. and Kedes,L.Isolation and characterization of full-length cDNA clones for human alpha-, beta-, and gamma-actin mRNAs: skeletal but not cytoplasmic actins have an amino-terminal cysteine that is subsequently removed. Mol. Cell. Biol.1983; 3 (5), 787-795.

2.Goebel,H.H., Brockmann,K., Bonnemann,C.G., Warlo,I.A., Hanefeld,F.,Labeit,S., Durling,H.J. and Laing,N.G.Actin-related myopathy without any missense mutation in the ACTA1 Gene. J. Child Neurol.2004; 19 (2), 149-153. 3.Laing,N.G., Clarke,N.F., Dye,D.E., Liyanage,K., Walker,K.R.,Kobayashi,Y., Shimakawa,S., Hagiwara,T., Ouvrier,R., Sparrow,J.C., Nishino,I., North,K.N. and Nonaka,I.Actin mutations are one cause of congenital fibre type disproportion.Ann. Neurol.2004; 56 (5), 689-694.