



Product Information Sheet

Polyclonal Anti- Calpain-1 (*Magnetic Bead Conjugate*)

Catalogue No. PA1364-M

Lot No. 0131112146427

Ig type rabbit IgG

Size 100µg/vial

Specificity

Human, rat, mouse.

No cross reactivity with other proteins.

Recommended application

ImmunoPrecipitation (IP)

Immunogen

A synthetic peptide corresponding to a sequence at the middle region of human Calpain-1 (312-326 aa), different from the mouse sequence by two amino acids.

Purity

Immunogen affinity purified.

Contents

Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN₃.

Storage

Store at 4°C for frequent use.

Description

This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation.

BACKGROUND

Calpain-1 catalytic subunit is a protein that in humans is encoded by the CAPN1 gene. Calpain is an intracellular protease that requires calcium for its catalytic activity. Two isozymes, calpain I (mu-calpain) and calpain II (m-calpain), with different calcium requirements, have been identified. Both are heterodimers composed of L (large, catalytic, 80 kD) and S (small, regulatory, 30 kD) subunits. The isozymes share an identical S subunit, with the differences arising from the L subunits, L1 (CAPN1) and L2. By quantitative RT-PCR, Ueyama et al. (1998) found that expression of calpain-1 and calpain-2 mRNA was significantly increased in muscle biopsy samples derived from 5 men with progressive muscular dystrophy (e.g., DMD; 310200) and 2 men and 3 women with amyotrophic lateral sclerosis (ALS; 105400) compared with controls. Using cDNA clones as probes, Ohno et al. (1989, 1990) assign CANPL1 to chromosome 11.

REFERENCE

1. Aoki K, Imajoh S, Ohno S, Emori Y, Koike M, Kosaki G, Suzuki K (Oct 1986). "Complete amino acid sequence of the large subunit of the low-Ca²⁺-requiring form of human Ca²⁺-activated neutral protease (muCANP) deduced from its cDNA sequence".