

Product name:	Calpain 10 Rabbit Polyclonal Antibody
Cat number:	ABN07864
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from the N-terminal region of human Calpain 10.
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,ELISA 1:20000-1:40000
Molecular Weight:	75kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

Calpains represent a ubiquitous, well-conserved family of calcium-dependent cysteine proteases. The calpain proteins are heterodimers consisting of an invariant small subunit and variable large subunits. The large catalytic subunit has four domains: domain I, the N-terminal regulatory domain that is processed upon calpain activation; domain II, the protease domain; domain III, a linker domain of unknown function; and domain IV, the calmodulin-like calcium-binding domain. This gene encodes a large subunit. It is an atypical calpain in that it lacks the calmodulin-like calcium-binding domain and instead has a divergent C-terminal domain. It is similar in organization to calpains 5 and 6. This gene is associated with type 2 or non-insulin-dependent diabetes mellitus (NIDDM), and is located within the NIDDM1 region. Multiple alternative transcript variants have been described for this gene. [provided by RefSeq,catalytic activity:Broad endopeptidase specificity.,disease:Genetic variations in CAPN10 are associated with susceptibility to non-insulin-dependent diabetes mellitus type 1 (NIDDM1) [MIM:601283]. Diabetes mellitus is a heterogeneous group of metabolic diseases characterized by high blood glucose levels which, if untreated, lead to blindness, kidney and heart disease, stroke, loss of limbs and reduced life expectancy. Diabetes mellitus can be divided into two main types, type 1 or insulin-dependent diabetes mellitus, and type 2 or non insulin-dependent diabetes mellitus (NIDDM) [MIM:125853]. NIDDM normally starts in adulthood and is characterized by defects in insulin action and insulin secretion.,function:Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.,similarity:Belongs to the peptidase C2 family.,similarity:Contains 1 calpain catalytic domain.,tissue specificity:Ubiquitous.,