

Calpain 12 (H-60): sc-50505

BACKGROUND

Calpains are calcium-activated thiol proteases. They are heterodimers with one large subunit and one small subunit. The large subunit varies between family members and can be active without the small subunit. Calpains are involved in intracellular processing of proteins. Calpain 12 is a typical calpain with protease and calcium binding domains. It is expressed ubiquitously, with a very high level of expression in the cortex of the hair follicle during the hair cycle anagen phase. The modification of Calpain 12, together with α Enolase and ATP5B, may play a significant role in plaque deposition of the brain.

REFERENCES

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- Gafni, J., et al. 2004. Inhibition of calpain cleavage of Huntingtin reduces toxicity: accumulation of calpain/caspase fragments in the nucleus. *J. Biol. Chem.* 279: 20211-20220.
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CHROMOSOMAL LOCATION

Genetic locus: CAPN12 (human) mapping to 19q13.2; Capn12 (mouse) mapping to 7 A3.

SOURCE

Calpain 12 (H-60) is a rabbit polyclonal antibody raised against amino acids 41-100 mapping near the N-terminus of Calpain 12 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Calpain 12 (H-60) is recommended for detection of Calpain 12 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Calpain 12 (H-60) is also recommended for detection of Calpain 12 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Calpain 12 siRNA (h): sc-62060, Calpain 12 siRNA (m): sc-62061, Calpain 12 shRNA Plasmid (h): sc-62060-SH, Calpain 12 shRNA Plasmid (m): sc-62061-SH, Calpain 12 shRNA (h) Lentiviral Particles: sc-62060-V and Calpain 12 shRNA (m) Lentiviral Particles: sc-62061-V.

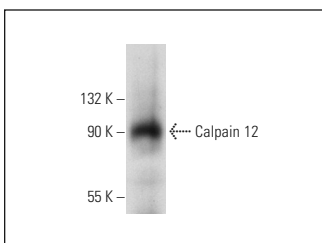
Molecular Weight of Calpain 12: 81 kDa.

Positive Controls: human skin extract: sc-363777.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Calpain 12 (H-60): sc-50505. Western blot analysis of Calpain 12 expression in human skin tissue extract.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.