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Calpain 11 (m): 293 Lysate: sc-178352

BACKGROUND

Calpains are calcium-activated thiol proteases. Calpain 7 (also known as PalBH) is a member of the Non-EF-hand subfamily of calpains and may be calcium independent. Calpain 7 has 813 amino acid residues and is a divergent member of the calpain family. It has only 26-35% shared identity to other members and most of this homology is in the protease domain. Calpain 7 seems to be related to PalB, an *Aspergillus nidulans* protease that is involved in alkaline ambient pH adaptation. A long N-terminal domain (N) and a PalB homologous domain (PBH) flank the calpain protease domain of calpain 7. Calpain 7 appears to have a ubiquitous tissue distribution but is highly expressed in the brain. It localizes to the cytoplasm and the nucleus, but its activated form is found only in the nucleus. Calpain 7 is an atypical calpain that lacks domain IV and cannot form a dimer with the 30 kDa regulatory subunit. Upregulation of Calpain 7 in striatal or cortical tissue of Huntington's Disease knock-in mice suggests that this protein may be involved in the onset of the disease.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: *Capn11* (mouse) mapping to 17 B3.

PRODUCT

Calpain 11 (h): 293 Lysate represents a lysate of human Calpain 11 transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Calpain 11 (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Calpain 11 antibodies.

Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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