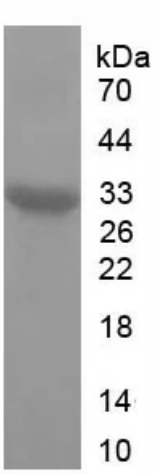
Active Calpain 3 (CAPN3)

Catalog#:PXH12884

概述（Summary）

别称（Alternative Names）	CANPL3; p94; LGMD2; LGMD2A; nCL1; Calcium-activated neutral proteinase 3; Muscle-specific calcium-activated neutral protease 3; New calpain 1
纯度（Purity）	Greater than 95% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ile602-Ala821】
Accession #	P20807
表达宿主（Host）	-
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	29.1 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Calcium-regulated non-lysosomal thiol-protease. Proteolytically cleaves CTBP1 at 'His-409'. Mediates, with UTP25, the proteasome-independent degradation of p53/TP53.

电泳图（SDS-PAGE image）



Greater than 95% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

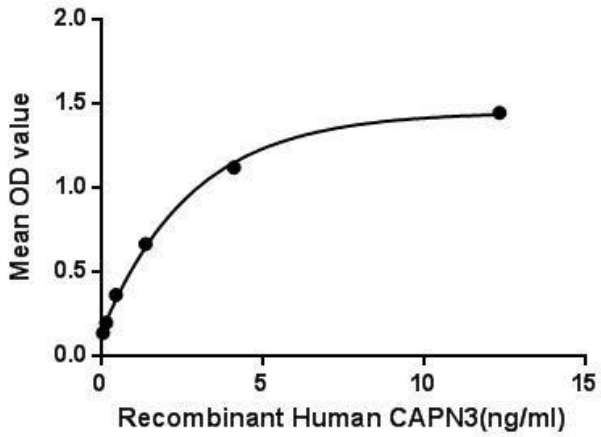


Figure. The binding activity of CAPN3 with TTN. Calpain 3 is a calcium-dependent cysteine protease mainly expressed in skeletal muscle. In humans, calpain 3 is encoded by the CAPN3 gene. This gene encodes a muscle-specific member of the calpain large subunit family that specifically binds to titin. Mutations in this gene are associated with limb-girdle muscular dystrophies type 2A. Alternate promoters and alternative splicing result in multiple transcript variants encoding different isoforms and some variants are ubiquitously expressed. Besides, Titin (TTN) has been identified as an interactor of CAPN3, thus a binding ELISA assay was conducted to detect the interaction of recombinant human CAPN3 and recombinant human TTN. Briefly, CAPN3 were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to TTN-coated microtiter wells and incubated for 2h at 37℃. Wells were washed with PBST and incubated for 1h with anti-CAPN3 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of CAPN3 and TTN was shown in Figure 1, and this effect was in a dose dependent manner.

注意事项（Note）

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