

# KY peptidase (K-16): sc-99961

## BACKGROUND

Filamins are actin-binding proteins which contain an N-terminal actin-binding domain, a membrane glycoprotein domain and a C-terminal self-association domain. Filamins help reshape the cytoskeleton by forming flexible cross-links between two actin filaments, which maintain membrane integrity during force application. Filamin 2, also designated Filamin C, is a skeletal- and cardiac-muscle specific form of Filamin, which binds  $\gamma$ -sarcoglycan and  $\delta$ -sarcoglycan, but not  $\alpha$ -sarcoglycan or  $\beta$ -sarcoglycan. KY peptidase (kyphoscoliosis peptidase) is a 561 amino acid cytoskeleton protease that interacts with several sarcomeric cytoskeletal proteins, including Filamin 2. KY peptidase probably plays a role in the maturation, function and stabilization of the neuromuscular junction. KY-null mouse mutants exhibit distinct irregular subcellular Filamin 2 localization, suggesting that KY peptidase deficiency may be the cause of several types of limb-girdle muscular dystrophies.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: KY (human) mapping to 3q22.2; Ky (mouse) mapping to 9 F1.

## SOURCE

KY peptidase (K-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of KY peptidase of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-99961 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

KY peptidase (K-16) is recommended for detection of KY peptidase of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

KY peptidase (K-16) is also recommended for detection of KY peptidase in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for KY peptidase siRNA (h): sc-78084, KY peptidase siRNA (m): sc-146614, KY peptidase shRNA Plasmid (h): sc-78084-SH, KY peptidase shRNA Plasmid (m): sc-146614-SH, KY peptidase shRNA (h) Lentiviral Particles: sc-78084-V and KY peptidase shRNA (m) Lentiviral Particles: sc-146614-V.

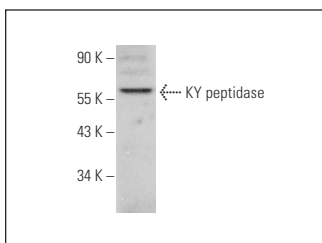
Molecular Weight of KY peptidase isoforms 1/2: 64/42 kDa.

Positive Controls: rat liver extract: sc-2395.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



KY peptidase (K-16): sc-99961. Western blot analysis of KY peptidase expression in rat liver tissue extract.

## STORAGE

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

## RESEARCH USE

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