

Chymotrypsin (602): sc-59483

BACKGROUND

Chymotrypsins, such as Chymotrypsin C (also known as pancreatic Chymotrypsin or Chymotrypsin), are digestive enzymes that can perform proteolysis by cleaving peptides at the carboxyl side of tyrosine, tryptophan and phenylalanine, although over time they can also hydrolyze other amide bonds, especially those with leucine-donated carboxyls. Chymotrypsins cleave peptide bonds by attacking the un-reactive carbonyl group with a powerful nucleophile, the Serine 195 residue located in the active site of the enzyme, which momentarily becomes covalently bonded to the substrate to form an intermediate. Chymotrypsin C is synthesized in the pancreas by protein biosynthesis as a precursor called chymotrypsinogen that is enzymatically inactive, but becomes active as a three polypeptide molecule that is interconnected by disulfide bonds.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CTRC (human) mapping to 1p36.21; Ctrc (mouse) mapping to 4 E1.

SOURCE

Chymotrypsin (602) is a mouse monoclonal antibody raised against full length Chymotrypsin of human origin.

PRODUCT

Each vial contains 100 μ g IgG₃ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

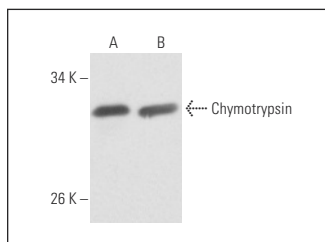
Chymotrypsin (602) is recommended for detection of Chymotrypsin C of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with human pancreatic trypsin.

Suitable for use as control antibody for Chymotrypsin siRNA (h): sc-72906, Chymotrypsin siRNA (m): sc-72907, Chymotrypsin shRNA Plasmid (h): sc-72906-SH, Chymotrypsin shRNA Plasmid (m): sc-72907-SH, Chymotrypsin shRNA (h) Lentiviral Particles: sc-72906-V and Chymotrypsin shRNA (m) Lentiviral Particles: sc-72907-V.

Molecular Weight of Chymotrypsin: 34 kDa.

Positive Controls: mouse pancreas extract: sc-364244 or human pancreas extract: sc-363770.

DATA



Chymotrypsin (602): sc-59483. Western blot analysis of Chymotrypsin expression in mouse pancreas (A) and human pancreas (B) tissue extracts.

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.

PROTOCOLS

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