

PACE4 (C-20): sc-22899

BACKGROUND

The subtilisin-like prohormone convertase (PC) family mediates the cleavage of latent precursor proteins into their biologically active forms. Such proteins include neuropeptides, polypeptide hormones, protein tyrosine phosphatases, growth factors and their receptors and enzymes. The members of the PC family include furin, PC1/3, PC2, PC4, PACE4, PC5/6 and PC7/8 (also designated lymphoma proprotein convertase or LPC). These proteins share a high degree of homology, but they have different expression patterns as well as substrate specificities. PACE4 is one of the neuroendocrine-specific mammalian subtilisin-related endoproteases believed to function in the secretory pathway.

REFERENCES

1. Rehemtulla, A., et al. 1993. PACE4 is a member of the mammalian propeptidase family that has overlapping but not identical substrate specificity to PACE. *Biochemistry* 32: 11586-11590.
2. Creemers, J.W., et al. 1993. Proprotein processing activity and cleavage site selectivity of the Kex2-like endoprotease PACE4. *FEBS Lett.* 336: 65-69.

CHROMOSOMAL LOCATION

Genetic locus: PCSK6 (human) mapping to 15q26.3; Pcsk6 (mouse) mapping to 7 C.

SOURCE

PACE4 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PACE4 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-22899 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PACE4 (C-20) is recommended for detection of PACE4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

PACE4 (C-20) is also recommended for detection of PACE4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for PACE4 siRNA (h): sc-43990, PACE4 siRNA (m): sc-151985, PACE4 shRNA Plasmid (h): sc-43990-SH, PACE4 shRNA Plasmid (m): sc-151985-SH, PACE4 shRNA (h) Lentiviral Particles: sc-43990-V and PACE4 shRNA (m) Lentiviral Particles: sc-151985-V.

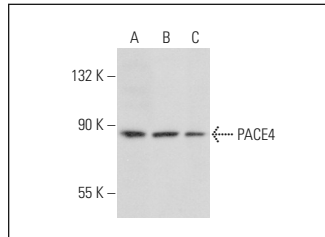
Molecular Weight of PACE4: 106 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or Hel.92.1.7 nuclear extract.

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



PACE4 (C-20): sc-22899. Western blot analysis of PACE4 expression in HeLa (A) and K-562 (B) whole cell lysates and HEL 92.1.7 nuclear extract (C).

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 or our catalog for detailed protocols and support products.


 MONOS
Satisfaction
Guaranteed

Try **PACE4 (2D6): sc-517067**, our highly recommended monoclonal alternative to PACE4 (C-20).