



Pancreatic Icosapeptide (R-17): sc-54292

BACKGROUND

Pancreatic Polypeptide (PP) and Pancreatic Icosapeptide (PI) are both deduced from the pancreatic prohormone precursor. The two peptide sequences are separated by a Gly-Lys-Arg cleavage and amidation site. The Pancreatic Polypeptide lies on the N-terminal side of this cleavage site while the Pancreatic Icosapeptide lies on the C-terminal side. The prohormone precursor is produced by the endocrine F cells of the pancreatic islets and, in response to food intake, the Pancreatic Polypeptide is released into the circulation. The Pancreatic Polypeptide is a member of the neuropeptide Y (NPY) family of hormones that bind to Y receptors. In particular, it binds to Y4 receptors and functions as an anorexigenic hormone. Subjects with Prader-Willi syndrome have a decreased Pancreatic Polypeptide response to a meal. Administration of Pancreatic Polypeptide decreases food intake and may serve as a therapeutic option for treatment of obesity.

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CHROMOSOMAL LOCATION

Genetic locus: Ppy (rat) mapping to 10q32.1.

SOURCE

Pancreatic Icosapeptide (R-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of pancreatic prohormone precursor of rat 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-54292 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Pancreatic Icosapeptide (R-17) is recommended for detection of Pancreatic Icosapeptide and pancreatic prohormone precursor of rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Molecular Weight of Pancreatic Icosapeptide precursor: 12 kDa.

Molecular Weight of Pancreatic Icosapeptide: 2 kDa.

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) 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.

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.