

ENSA/ARPP-19 (FL-121): sc-135145

BACKGROUND

Sulfonylureas are a class of drugs commonly used in the management of non Insulin-dependent diabetes mellitus. ENSA/ARPP-19, also known as ARPP-19e, is a 121 amino acid protein that localizes to the cytoplasm and belongs to the endosulfine family. ENSA/ARPP-19 is an endogenous regulator of the β -cell K(ATP) channels and reduces K(ATP) channel currents by inhibiting sulfonylurea from binding to the receptor thereby stimulating Insulin secretion by pancreatic β cells. It is suggested that ENSA/ARPP-19 expression is decreased in brains of both Alzheimer's disease (AD) and Down's syndrome patients. Widely expressed with high levels in skeletal muscle and brain and lower levels in pancreas, ENSA/ARPP-19 is phosphorylated by PKA and exists as eight alternatively spliced isoforms. ENSA/ARPP-19 is encoded by a gene located on human chromosome 1q21.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ENSA (human) mapping to 1q21.3, ARPP19 (human) mapping to 15q21.2; Ensa (mouse) mapping to 3 F2.1, Arpp19 (mouse) mapping to 9 D.

SOURCE

ENSA/ARPP-19 (FL-121) is a rabbit polyclonal antibody raised against amino acids 1-121 representing full length ENSA of human origin.

PRODUCT

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

APPLICATIONS

ENSA/ARPP-19 (FL-121) is recommended for detection of Endosulfine α and ARPP-19 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)], 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).

ENSA/ARPP-19 (FL-121) is also recommended for detection of Endosulfine α and ARPP-19 in additional species, including equine, canine, bovine and porcine.

Molecular Weight of ENSA/ARPP-19: 13 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.


 MONOS
Satisfation
Guaranteed

Try **ENSA (L70): sc-81883**, our highly recommended monoclonal alternative to ENSA/ARPP-19 (FL-121).