

ECP (I-13): sc-135469

BACKGROUND

ECP (eosinophil cationic protein), also known as RNS3 or RNASE3 (ribonuclease, RNase A family, 3), is a 160 amino acid potent cytotoxic secretory protein that belongs to the pancreatic ribonuclease family. ECP localizes to the granule matrix of the eosinophil and is involved in the immune response system. ECP is a cytotoxin, neurotoxin and helminthotoxin that is secreted by activated human eosinophils. ECP exhibits anti-parasitic, antibacterial and ribonucleolytic activities. It has been suggested that ECP induces the neurotoxic effect known as the Gordon phenomenon, a syndrome manifested by ataxia, muscular rigidity, paralysis and tremor that may lead to death. ECP is considered a marker of eosinophilic inflammation and high levels have been found in cases of active asthma and other allergic diseases.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RNASE3 (human) mapping to 14q11.2.

STORAGE

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

SOURCE

ECP (I-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ECP of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-135469 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ECP (I-13) is recommended for detection of ECP of human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

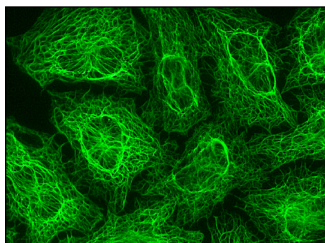
Suitable for use as control antibody for ECP siRNA (h): sc-105319, ECP shRNA Plasmid (h): sc-105319-SH and ECP shRNA (h) Lentiviral Particles: sc-105319-V.

Molecular Weight of ECP: 18-25 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) 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.

DATA



ECP (I-13): sc-135469. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoskeletal localization.

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.