

ECP (C3): sc-517595

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.

SOURCE

ECP (C3) is a mouse monoclonal antibody raised against recombinant ECP of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and 5% glycerol.

APPLICATIONS

ECP (C3) is recommended for detection of ECP of human 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

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 mature/secreted ECP: 18-25 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgGλ BP-FITC: sc-516185 or m-IgGλ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 3) Immunohistochemistry: use m-IgGλ BP-HRP: sc-516132 with DAB, 50X: sc-24982 and Immuno-histomount: sc-45086, or Organo/Limonene Mount: sc-45087.

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.