

## SIAE (E-17): sc-244136

### BACKGROUND

SIAE (sialic acid acetyltransferase) is a 523 amino acid secreted protein that is widely expressed with high expression in the testis, prostate and colon. Sialic acids are acidic 9-carbon sugars typically found at the nonreducing end of sugar chains. They are frequently modified by 9-O-acetylation, and this modification is removed by sialic acid acetyltransferases. The SIAE protein catalyzes the removal of O-acetyl ester groups from position 9 of the parent sialic acid, N-acetylneuraminic acid. Defects in SIAE are a cause of autoimmune disease type 6 (AIS6). Individuals manifesting susceptibility to AIS6 can suffer from juvenile idiopathic arthritis, rheumatoid arthritis, multiple sclerosis, Sjogren syndrome, systemic lupus erythematosus, type 1 diabetes, ulcerative colitis and Crohn disease. Existing as two alternatively spliced isoforms, the SIAE gene is conserved in chimpanzee, canine, bovine, mouse and zebrafish, and maps to human chromosome 11q24.2.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: SIAE (human) mapping to 11q24.2.

### SOURCE

SIAE (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SIAE 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-244136 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

SIAE (E-17) is recommended for detection of SIAE 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

SIAE (E-17) is also recommended for detection of SIAE in additional species, including equine, canine and porcine.

Suitable for use as control antibody for SIAE siRNA (h): sc-96456, SIAE shRNA Plasmid (h): sc-96456-SH and SIAE shRNA (h) Lentiviral Particles: sc-96456-V.

Molecular Weight of SIAE isoforms 1/2: 58/55 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotting 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<sup>™</sup> 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](http://www.scbt.com) or our catalog for detailed protocols and support products.