

Siglec-G (E-14): sc-240885

BACKGROUND

Siglec-G, also known as Siglec10, is a 688 amino acid membrane protein expressed highly in B-1 lymphocyte cells. B-1 cells are important to the humoral immune response by producing antibodies against antigens and acting as antigen presenting cells (APCs). Siglec-G is believed to be a B-1 cell inhibitory receptor. Siglec-G, along with CD24, also acts to selectively suppress tissue damage-induced immune responses. The gene that encodes Siglec-G maps to mouse chromosome 7. Many of the mouse homologs of genes on chromosome 7 are located on human chromosome 19. Around 63 million bases with over 1,400 genes, chromosome 19 makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Siglecg (mouse) mapping to 7 B4.

SOURCE

Siglec-G (E-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Siglec-G of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-240885 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Siglec-G (E-14) is recommended for detection of Siglec-G of mouse and 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); non cross-reactive with other Siglec family members.

Suitable for use as control antibody for Siglec-G siRNA (m): sc-153463, Siglec-G shRNA Plasmid (m): sc-153463-SH and Siglec-G shRNA (m) Lentiviral Particles: sc-153463-V.

Molecular Weight of Siglec-G: 77 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.