

Siglec-5 (h): 293T Lysate: sc-114461

BACKGROUND

Two families of mammalian lectin-like adhesion molecules bind glycoconjugate ligands in a sialic acid-dependent manner: the selectins and the sialoadhesins. The sialic acid-binding immunoglobulin superfamily lectins, designated siglecs or sialoadhesins, are immunoglobulin superfamily members recognizing sialylated ligands. Siglec-5 binds equally to α 2,3-linked and α 2,6-linked sialic acid. There exist four isoforms of hSiglec-5 possessing three (hSiglec-5-3L and -3C) or four (hSiglec-5-4L and -4S) extracellular domains linked to long (hSiglec-5-3L and -4L) or short (hSiglec-5-4S) cytoplasmic tails or existing as a soluble isoform (hSiglec-5-3C). Siglec-5 is expressed by monocytes and neutrophils, but is absent from leukemic cell lines representing early stages of myelomonocytic differentiation. Siglec-5 may play a role in the diagnosis and monitoring of acute myeloid leukemia (AML).

REFERENCES

1. Connolly, N.P., et al. 2002. Human Siglec-5: tissue distribution, novel isoforms and domain specificities for sialic acid-dependent ligand interactions. *Br. J. Haematol.* 119: 221-238.
2. Erickson-Miller, C.L., et al. 2003. Characterization of Siglec-5 (CD170) expression and functional activity of anti-Siglec-5 antibodies on human phagocytes. *Exp. Hematol.* 31: 382-388.
3. Virgo, P., et al. 2003. Identification of the CD33-related Siglec receptor, Siglec-5 (CD170), as a useful marker in both normal myelo-poiesis and acute myeloid leukaemias. *Br. J. Haematol.* 123: 420-430.
4. Avril, T., et al. 2005. Siglec-5 (CD170) can mediate inhibitory signaling in the absence of immunoreceptor tyrosine-based inhibitory motif phosphorylation. *J. Biol. Chem.* 280: 19843-19851.
5. Rapoport, E.M., et al. 2005. Sialoside-binding macrophage lectins in phagocytosis of apoptotic bodies. *Biochemistry* 70: 330-338.

CHROMOSOMAL LOCATION

Genetic locus: SIGLEC5 (human) mapping to 19q13.41.

PRODUCT

Siglec-5 (h): 293T Lysate represents a lysate of human Siglec-5 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Siglec-5 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Siglec-5 antibodies. Recommended use: 10-20 μ l per lane.

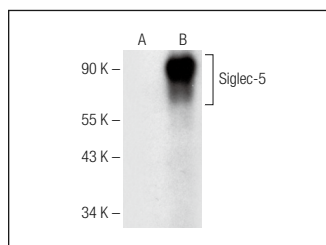
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Siglec-5/14 (E-1): sc-374585 is recommended as a positive control antibody for Western Blot analysis of enhanced human Siglec-5 expression in Siglec-5 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

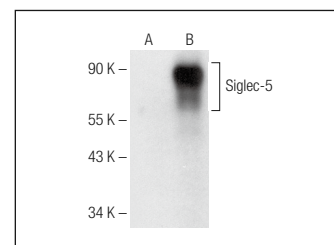
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-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.

DATA



Siglec-5/14 (E-1): sc-374585. Western blot analysis of Siglec-5 expression in non-transfected: sc-117752 (A) and human Siglec-5 transfected: sc-114461 (B) 293T whole cell lysates.



Siglec-5/14 (C-2): sc-374584. Western blot analysis of Siglec-5 expression in non-transfected: sc-117752 (A) and human Siglec-5 transfected: sc-114461 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.