

DESCRIPTION

Species Reactivity	Human
Specificity	Detects SREC-I/SCARF1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human (rh) SREC-II is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human SREC-I/SCARF1 Ser20-Thr421 Accession # Q14162
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Blockade of Receptor-ligand Interaction	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

The scavenger receptor (SR) family comprises a group of functionally defined membrane receptors that share a common ability to bind and internalize modified forms of low density lipoproteins (LDL) such as acetylated LDL (AcLDL) and oxidized LDL (OxLDL) (1-3). Family members are classified alphabetically. They play important roles in lipid metabolism, in host defence and in the regulation of acquired immunity (2, 4). Scavenger receptor expressed by endothelial cells-I (SREC-I) and SREC-II are two proteins that belong to the F type scavenger receptor group (SR-F1 and SR-F2). The full length cDNA of human SREC-I encodes an 830 amino acid (aa) type I transmembrane protein which contains a 19 aa signal peptide, a 402 aa extracellular region, a 21 aa transmembrane segment, and a 388 aa long cytoplasmic domain. The extracellular region contains ten EGF-like repeats (five of which fit the exact consensus sequence for an EGF-like domain) while the cytoplasmic domain is rich in serine and proline in the N-terminal half, and glycine in the C-terminal segment (5, 6). In addition to the full length form, four SREC-I isoforms exist. Two show insertions of a stop codon in EGF-like domain #8, resulting in mature soluble forms of 323 aa and 318 aa, respectively. A third isoform deletes part of domain #8 plus domains #9 and #10; it continues in-frame to generate a mature transmembrane protein of 725 aa. The last isoform shows only cytoplasmic splicing, with 72 aa substituted for the last 332 aa of the full length form. All three transmembrane forms bind acetylated LDL (6). Native SREC-I is approximately 150 kDa in size, and expressed by endothelial cells, macrophages and fetal neurons (7, 8). In the extracellular region human SREC-I is 76% aa identical to mouse SREC-I. The extracellular regions of human SREC-I and II are 53% aa identical.

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