Human SCARA5 Biotinylated Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: BAF4900

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SCARA5 in Western blots. In Western blots, approximately 25% cross-reactivity with recombinant mouse SCARA5 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human SCARA5 Arg83-His495 Accession # Q6ZMJ2
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human SCARA5 (Catalog # 4900-SR)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Scavenger receptor A5 (SCARA5) is also known as testis expressed scavenger receptor (Tesr). Class A scavenger receptors, including CL-P1, MARCO, SCARA3, and SR-A1, are type II transmembrane proteins that contain a collagenous stalk (1-3). Mature human SCARA5 consists of a 60 amino acid (aa) cytoplasmic domain, a 21 aa transmembrane segment, and a 414 aa extracellular domain (ECD) with a spacer, a collagen-like, and a scavenger receptor cysteine-rich (SRCR) domain (4-6). Within the ECD, human SCARA5 shares 87% aa sequence identity with mouse and rat SCARA5. It shares 23%-34% aa sequence identity with CL-P1, MARCO, SCARA3, and SR-A1. Alternate splicing generates isoforms that lack the SRCR domain, the transmembrane segment, or the 225 aa spacer region between the membrane and the collagen-like domain (6). SCARA5 is a cell surface disulfide-linked homotrimer of > 250 kDa (5). It is highly expressed in testicular Sertoli and germ cells and more weakly in the epithelia of other tissues (4, 5). During mouse development, SCARA5 expression is attenuated in female embryos at the time of sex determination, whereas it is maintained in the developing testis (4). SCARA5 is re-expressed in the adult ovary (4). SCARA5 binds heat-killed bacterial particles but not yeast particles or modified LDL (5).

References:

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2. Mukhopadhyay, S. And S. Gordon (2004) Immunobiology **209**:39.
3. Sarrias, M.R. *et al.* (2004) Crit. Rev. Immunol. **24**:1.
4. Sarraj, M.A. *et al.* (2005) Dev. Dyn. **234**:1026.
5. Jiang, Y. *et al.* (2006) J. Biol. Chem. **281**:11834.
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