

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SorCS2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 20% cross-reactivity with recombinant mouse (rm) SorCS2 is observed and less than 1% cross-reactivity with recombinant human (rh)&nbs
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	NS0-derived recombinant human SorCS2 Ser70-Gly1078 Accession # Q96PQ0
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	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

SorCS2 is a type I transmembrane glycoprotein receptor that belongs to the mammalian Vps10p (vacuolar protein-sorting 10 protein) family (1, 2). Family receptors include sortilin, SorLA, and three SorCS proteins. All SorCS proteins are predominantly expressed in the brain, especially during development, but vary in other locations (1-3). SorCS2 mRNA has also been found in the kidney, lung, testis and heart (1, 2). SorCS2 presumably mediates endocytosis, but its ligands are not well-defined. However, the other SorCS proteins have been shown to bind NGF and PDGF-BB (4-6). Human SorCS2 is synthesized as a 1159 amino acid (aa) prepro form with a 50 aa signal sequence and a potential furin-type proteolytic processing site at aa 119. This would produce a mature SorCS2 protein of 1040 aa with a 959 aa extracellular/luminal domain (ECD), a 21 aa transmembrane domain and a 60 aa cytoplasmic domain. The ECD contains an imperfect leucine-rich repeat (LRR) and a Vps10p domain (2). Within the ECD, human SorCS2 shares 89%, 88%, 88% and 79% aa identity with mouse, rat, equine and canine SorCS2, respectively. It also shares 46% aa identity with the ECD of both SorCS1 and SorCS3. Unlike other SorCS, shedding of the SorCS2 ECD occurs very slowly and is mainly independent of the metalloproteinase TACE/ADAM17 (4).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.