**BACKGROUND**

The LASS (longevity assurance homolog) family members are highly conserved from yeasts to mammals. Six members of this family of proteins involved in sphingolipid synthesis have been characterized (LASS1, LASS2, LASS3, LASS4, LASS5 and LASS6). LASS2 is a 380 amino acid multi-pass membrane protein expressed in kidney, liver, brain, heart, placenta and lung. LASS2 suppresses the growth of cancer cells and is involved in sphingolipid synthesis. Overproduction of LASS2 increases the levels of long ceramides such as C22:0- and C24:0-ceramides. The N-terminal asparagine residue serves as a site for glycosylation on the luminal side of the endoplasmic reticulum membrane. LASS2 interacts with several membrane-associated receptors or transporters including ASGPR1, ASGPR2 and OCT1.

**CHROMOSOMAL LOCATION**

Genetic locus: CERS2 (human) mapping to 1q21.3; Cers2 (mouse) mapping to 12 chromosome.

**SOURCE**

LASS2 (C-11) is a mouse monoclonal antibody raised against amino acids 141-180 mapping within an internal region of LASS2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgGκ, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

LASS2 (C-11) is available conjugated to agarose (sc-390745 AC), 500 µg/0.25 ml agarose in 1 ml, for IF; to HRP (sc-390745 HRP), 200 µg/ml, for WB, IHC and ELISA; to either phycoerythrin (sc-390745 PE), fluorescein (sc-390745 FITC), Alexa Fluor® 488 (sc-390745 AF488), Alexa Fluor® 546 (sc-390745 AF546), Alexa Fluor® 594 (sc-390745 AF594) or Alexa Fluor® 647 (sc-390745 AF647), 200 µg/ml, for WB (RGB), IF, IHC and FCM; and to either Alexa Fluor® 680 (sc-390745 AF680) or Alexa Fluor® 790 (sc-390745 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

LASS2 (C-11) is recommended for detection of LASS2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

LASS2 (C-11) is also recommended for detection of LASS2 in additional species, including equine and canine.


Molecular Weight of LASS2: 45 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, CCRF-CEM cell lysate: sc-2225 or Caki-1 cell lysate: sc-2224.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1. Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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.
2. Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

**DATA**

![Western blot analysis](image1)

**SELECT PRODUCT CITATIONS**


**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 website at www.scbt.com for detailed protocols and support products.

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