SR-4 (G-3): sc-376158

BACKGROUND
Serotonin (also designated 5-hydroxytryptamine or 5-HT) is a molecule that functions as a neurotransmitter, a hormone and a mitogen, and it is predominantly expressed in the gut, platelets and central nervous system (CNS). In the CNS, Serotonin modulates several processes, including anxiety, sleep, appetite, behavior and drug abuse. In platelets and gut, Serotonin plays a major role in cardiovascular function and motility of the gastrointestinal tract, respectively. Serotonin mediates its effects through several G protein-coupled receptors, designated 5-HT receptors or alternatively SR receptors. SR-3 is a ligand-gated ion channel, whereas all other known Serotonin receptor subtypes are G protein-coupled receptors. The gene which encodes SR-3 maps to human chromosome 11q23.2. SR-4 mediates widespread effects in central and peripheral nervous systems. The gene which encodes SR-4 maps to human chromosome 5q32. SR-7 belongs to the superfAMILY of G protein-coupled receptors. The gene which encodes SR-7 maps to human chromosome 10q23.31.

CHROMOSOMAL LOCATION
Genetic locus: HTR4 (human) mapping to 5q32; Htr4 (mouse) mapping to 18 E1.

SOURCE
SR-4 (G-3) is a mouse monoclonal antibody raised against amino acids 156-284 mapping within an internal region of SR-4 of human origin.

PRODUCT
Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.
SR-4 (G-3) is available conjugated to agarose (sc-376158 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376158 HRP), 200 µg/ml, for WB, HRP; and to FITC, Alexa Fluor® 488 (sc-376158 AF488), Alexa Fluor® 546 (sc-376158 AF546), Alexa Fluor® 594 (sc-376158 AF594) or Alexa Fluor® 647 (sc-376158 AF647), 200 µg/ml, for WB (RGB), IF, HRP and FCM; and to either Alexa Fluor® 680 (sc-376158 AF680) or Alexa Fluor® 790 (sc-376158 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS
SR-4 (G-3) is recommended for detection of SR-4 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). Suitable for use as control antibody for SR-4 siRNA (h): sc-42239, SR-4 siRNA (m): sc-42240, SR-4 shRNA Plasmid (h): sc-42239-sh, SR-4 shRNA Plasmid (m): sc-42240-sh, SR-4 shRNA (h) Lentiviral Particles: sc-42239-V and SR-4 shRNA (m) Lentiviral Particles: sc-42240-V.
Molecular Weight of SR-4: 42 kDa.
Positive Controls: U-87 MG cell lysate: sc-2411.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG BP-HRP; sc-516102 or m-IgG 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). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG BP-HRP: sc-516102 with DAB, 50X: sc-24982 and ImmunohistoMount: sc-45086; or Organo/Limonene Mount: sc-45087.

DATA
SR-4 (G-3): sc-376158. Western blot analysis of full length human recombinant SR-4 fusion protein.

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 web site at www.scbt.com for detailed protocols and support products.
Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.