**PAR-2 (SAM11): sc-13504**

**BACKGROUND**

Thrombin receptor (also designated protease-activated receptor-1 or PAR-1), PAR-2 and PAR-3 compose a distinct class of G protein-coupled receptors activated by proteolysis. Cleavage of these receptors by proteases occurs within the amino-terminal extracellular domain. Thrombin, a serine protease involved in platelet aggregation and blood coagulation, activates the Thrombin receptor, resulting in elevated intracellular calcium levels in platelets. Thrombin also cleaves PAR-3 in vitro, suggesting that PAR-3 may be involved in thrombosis or mitogenesis. Thrombin receptor and PAR-4 appear to account for most Thrombin signaling in platelets. Activation of PAR-2 in vitro is induced by trypsin, suggesting that PAR-2 is not an alternative Thrombin receptor. Cytokines including TNF-α and IL-1β increase PAR-2 expression, indicating PAR-2 involvement in the acute inflammatory response.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: F2RL1 (human) mapping to 5q13.3; F2rl1 (mouse) mapping to 13 D1.

**SOURCE**

PAR-2 (SAM11) is a mouse monoclonal antibody raised against amino acids 37-50 of PAR-2 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. Also available azide-free for neutralization studies, sc-13504 L, 200 µg/0.1 ml.

PAR-2 (SAM11) is available conjugated to agarose (sc-13504 AC), 500 µg/0.25 ml agarose in 1 ml for IP; to HRP (sc-13504 HRP), 200 µg/ml for WB, IHC(+) and ELISA; to either phycoerythrin (sc-13504 PE), fluorescein (sc-13504 FITC), Alexa Fluor® 546 (sc-13504 AF546), Alexa Fluor® 594 (sc-13504 AF594) or Alexa Fluor® 647 (sc-13504 AF647), 200 µg/ml, for WB (RGB), IHC(+) and FCM; and to either Alexa Fluor® 680 (sc-13504 AF680) or Alexa Fluor® 790 (sc-13504 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA.

**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.

**APPLICATIONS**

PAR-2 (SAM11) is recommended for detection of PAR-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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 flow cytometry (1 µg per 1 x 10⁶ cells).


Molecular Weight (predicted): 44 kDa.

Molecular Weight (observed) of PAR-2: 50-100 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, WiDr cell lysate: sc-24779 or F9 cell lysate: sc-2245.

**DATA**

**SELECT PRODUCT CITATIONS**


**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.