**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.

**CHROMOSOMAL LOCATION**

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

**SOURCE**

PAR-2 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PAR-2 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8205 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

PAR-2 (C-17) 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight (predicted) of PAR-2: 44 kDa.

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

Positive Controls: Hep G2 cell lysate: sc-2227, COLO 320DM cell lysate: sc-2226 or NIH/3T3 whole cell lysate: sc-2210.

**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.

**DATA**

Try PAR-2 (SAM11): sc-13504 or PAR-2 (3G233): sc-71842, our highly recommended monoclonal alternatives to PAR-2 (C-17). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see PAR-2 (SAM11): sc-13504.