**BACKGROUND**

A gene designated Tiam1 was originally identified as an invasion-inducing gene by proviral tagging in combination with in vitro selection for invasiveness. Transfection of truncated Tiam1 cDNAs into noninvasive cells made these cells invasive. The predicted Tiam1 protein exhibits both Dbl and Pleckstrin-homologous domains characteristic of GDP-GTP exchange proteins for Rho-like proteins that have been implicated in cytoskeletal organization. In fibroblasts, Tiam1 induces a phenotype similar to that of constitutively activated (V12) Rac 1, including membrane ruffling, and this is inhibited by dominant negative (N17) Rac 1. Moreover, T lymphoma cells expressing (V12) Rac 1 become invasive, supporting the suggestion that the Tiam1-Rac signaling pathway may be involved in the invasion and metastasis of tumor cells.

**CHROMOSOMAL LOCATION**

Genetic locus: TIAM1 (human) mapping to 21q22.11; Tiam1 (mouse) mapping to 16 C3.3.

**SOURCE**

Tiam1 (C-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of Tiam1 of mouse 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-872 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Tiam1 (C-16) is recommended for detection of Tiam1 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).

Tiam1 (C-16) is also recommended for detection of Tiam1 in additional species, including equine, canine, porcine and avian.

Suitable for use as control antibody for Tiam1 siRNA (h): sc-36669, Tiam1 siRNA (m): sc-36667, Tiam1 shRNA Plasmid (h): sc-36669-SH, Tiam1 shRNA Plasmid (m): sc-36670-SH, Tiam1 shRNA (h) Lentiviral Particles: sc-36669-V and Tiam1 shRNA (m) Lentiviral Particles: sc-36670-V.

Molecular Weight of Tiam1: 200 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210 or human heart extract: sc-363763.

**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**

**SELECT PRODUCT CITATIONS**