**BACKGROUND**

Treacle is a serine/alanine-rich 1,411-amino acid nuclear phosphoprotein that interacts with upstream binding factor (UBF) and affects transcription of the ribosomal DNA gene. Treacle is also involved in early embryonic development, particularly in the craniofacial complex, and may play a role in nucleolar-cytoplasmic transport. The Treacle protein contains three domains with unique N- and C-termini and a large central repeat domain. Mutations in TCOF1, the gene that encodes for Treacle, cause Treacher Collins-Franceschetti syndrome (TCS), a disorder characterized by defects in craniofacial development. Symptoms of TCS include conductive hearing loss, hypoplasia of the mandible and maxilla, downward sloping palpebral fissures and cleft palate.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: TCOF1 (human) mapping to 5q32; Tcof1 (mouse) mapping to 18 E1.

**SOURCE**

Treacle (L-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Treacle 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-49529P (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**APPLICATIONS**

Treacle (L-16) is recommended for detection of Treacle (Treacher Collins syndrome protein) 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 Treacle isoforms: 156/152/144/97 kDa.

Molecular Weight (observed) of Treacle: 183 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132.

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:2000-1:100,000) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:500-1:4000). 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

**DATA**

**STORAGE**

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.