

# HtrA4 (T-16): sc-87775

## BACKGROUND

The HtrA (high temperature requirement factor A) family all possess one or more C-terminal PDZ domains for binding target proteins and for regulating protein-protein interactions. There are four proteins that are in the human HtrA family of proteases, namely HtrA1, HtrA2, HtrA3 and HtrA4, which function as heat shock-induced serine proteases. HtrA4 is also known as HtrA serine peptidase 4 or probable serine protease HTRA4 and is a 476 amino acid protein. HtrA4 is an enzyme that is thought to be a secreted oligomeric chaperone protease which degrades misfolded secretory proteins and may exhibit some expression in human placenta. The gene encoding HtrA4 contains an IGF1BP (insulin growth factor binding domain) at the N-terminus, as well as a Kazal protease. In addition, the HtrA4 gene has been detected in human leprosy lesions, suggesting a possible role for HtrA4 in the pathogenesis of leprosy.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: HTRA4 (human) mapping to 8p11.22; Htra4 (mouse) mapping to 8 A2.

## SOURCE

HtrA4 (T-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HtrA4 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-87775 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

HtrA4 (T-16) is recommended for detection of HtrA4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

HtrA4 (T-16) is also recommended for detection of HtrA4 in additional species, including bovine.

Suitable for use as control antibody for HtrA4 siRNA (h): sc-77682, HtrA4 siRNA (m): sc-146113, HtrA4 shRNA Plasmid (h): sc-77682-SH, HtrA4 shRNA Plasmid (m): sc-146113-SH, HtrA4 shRNA (h) Lentiviral Particles: sc-77682-V and HtrA4 shRNA (m) Lentiviral Particles: sc-146113-V.

Molecular Weight of HtrA4: 51 kDa.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.