

PPIL6 (M-20): sc-169008

BACKGROUND

PPIL6 (peptidylprolyl isomerase (cyclophilin)-like 6), also known as PPlase (peptidyl-prolyl *cis-trans* isomerase-like 6), cyclophilin-like protein PPIL6 or rotamase PPIL6, is a 311 amino acid protein that contains one PPlase cyclophilin-type domain and belongs to the cyclophilin-type PPlase family. Similar to other PPlases, PPIL6 accelerates the folding of proteins and catalyzes the *cis-trans* isomerization of proline imidic peptide bonds in oligopeptides. However, PPIL6, along with Cyp60 and SDCCAG-10, occur as a small set of human cyclophilins that are unable to bind cyclosporin and tetrapeptide, and are divergent from other family members in terms of *in vitro* activity. Encoded by a gene that maps to human chromosome 6q21, PPIL6 is 38% identical to RSP12, another cyclophilin-type PPlase family member, which in addition to protein folding, may function as a regulatory protein. PPIL6 is a proposed candidate gene for prostate cancer progression.

REFERENCES

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- Galat, A. 2004. Function-dependent clustering of orthologues and paralogues of cyclophilins. *Proteins* 56: 808-820.
- Yang, P., et al. 2006. Radial spoke proteins of *Chlamydomonas flagella*. *J. Cell Sci.* 119: 1165-1174.
- Kim, J.H., et al. 2007. Integrative analysis of genomic aberrations associated with prostate cancer progression. *Cancer Res.* 67: 8229-8239.
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- Davis, T.L., et al. 2010. Structural and biochemical characterization of the human cyclophilin family of peptidyl-prolyl isomerases. *PLoS Biol.* 8: e1000439.

CHROMOSOMAL LOCATION

Genetic locus: Ppil6 (mouse) mapping to 10 B2.

SOURCE

PPIL6 (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of PPIL6 of mouse origin.

STORAGE

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

PROTOCOLS

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

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-169008 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PPIL6 (M-20) is recommended for detection of PPIL6 of mouse and rat 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); non cross-reactive with other PPIL family members.

Suitable for use as control antibody for PPIL6 siRNA (m): sc-152413, PPIL6 shRNA Plasmid (m): sc-152413-SH and PPIL6 shRNA (m) Lentiviral Particles: sc-152413-V.

Molecular Weight of PPIL6: 35 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™ 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) 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™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.