**BACKGROUND**

Caspases modulate apoptosis in various ways. Specifically, caspase-3, a death protease, is instrumental in cleaving cellular proteins, dismantling the cell and forming apoptotic bodies. pHyde has a potential role as a tumor suppressor by inducing caspase-3-mediated apoptosis and stimulating p53 expression. A dose-dependent increase in caspase-3 activity is observed in transduced pHyde DU145 cells. Furthermore, caspase-3 may be necessary for pHyde-mediated apoptosis. The pHyde gene may upregulate the apoptosis pathway and thus have a potential application in cancer gene therapy. Recombinant pHyde inhibits the growth of human prostate cancer cell lines DU145 and LNCaP in vitro. DU145 tumors may be reduced significantly in vivo when nude mice are injected with recombinant pHyde. pHyde also has a demonstrated growth inhibitory effect on human breast cancer cells. This suggests that pHyde may have a role in inhibiting different tumor types.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: STEAP3 (human) mapping to 2q14.2.

**SOURCE**

pHyde (G-25) is an affinity purified rabbit polyclonal antibody raised against synthetic pHyde peptide of human origin.

**PRODUCT**

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

**STORAGE**

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

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

**APPLICATIONS**

pHyde (G-25) is recommended for detection of pHyde of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for pHyde siRNA (h): sc-37487, pHyde shRNA Plasmid (h): sc-37487-SH and pHyde shRNA (h) Lentiviral Particles: sc-37487-V.

**RESEARCH USE**

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

**DATA**

pHyde (G-25) sc-133910 Western blot analysis of pHyde expression in human fetal liver tissue extract.