

VACVase (P-19): sc-54454

BACKGROUND

Vase, also known as valacyclovir hydrolase, BPHL (biphenyl hydrolase-like) or MCNAA, is a 291 amino acid member of the AB hydrolase superfamily. Highly expressed in liver and kidney, and weakly expressed in heart, intestine and skeletal muscle, VACVase is a serine hydrolase that functions to catalyze the hydrolytic activation of amino acid ester prodrugs and may play a role in chemical detoxification. VACVase exists as a monomer and contains a serine residue at its active site, allowing it to enzymatically hydrolyze and activate compounds such as valacyclovir (VACV), an antitherapeutic drug. VACVase is expressed in several carcinoma cell lines and, due to its enzymatic specificity, may be a potential activation target for anticancer and antiviral prodrugs. VACVase exists as two alternatively spliced isoforms designated α and β .

REFERENCES

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3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 603156. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
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5. Kim, I., Song, X., Vig, B.S., Mittal, S., Shin, H.C., Lorenzi, P.J. and Amidon, G.L. 2004. A novel nucleoside prodrug-activating enzyme: substrate specificity of biphenyl hydrolase-like protein. *Mol. Pharm.* 1: 117-127.
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CHROMOSOMAL LOCATION

Genetic locus: BPHL (human) mapping to 6p25.2; Bphl (mouse) mapping to 13 A3.3.

SOURCE

VACVase (P-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VACVase of human 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 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-54454 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VACVase (P-19) is recommended for detection of valacyclovir hydrolase precursor and mature VACVase of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

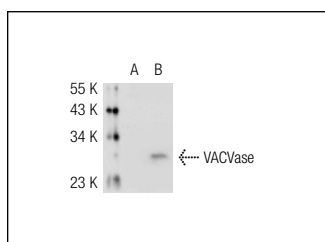
VACVase (P-19) is also recommended for detection of valacyclovir hydrolase precursor and mature VACVase in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for VACVase siRNA (h): sc-106687, VACVase siRNA (m): sc-155089, VACVase shRNA Plasmid (h): sc-106687-SH, VACVase shRNA Plasmid (m): sc-155089-SH, VACVase shRNA (h) Lentiviral Particles: sc-106687-V and VACVase shRNA (m) Lentiviral Particles: sc-155089-V.

Molecular Weight of VACVase: 30 kDa.

Positive Controls: VACVase (m): 293T Lysate: sc-124534.

DATA



VACVase (P-19): sc-54454. Western blot analysis of VACVase expression in non-transfected: sc-117752 (A) and mouse VACVase transfected: sc-124534 (B) 293T whole cell lysates.

RESEARCH USE

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