

# ADH6 (N-14): sc-70202

## BACKGROUND

ADH6 (alcohol dehydrogenase 6), also known as ADH-5, is a 368 amino acid member of the class V zinc-containing alcohol dehydrogenase family. This family of enzymes functions to metabolize a wide variety of substrates such as retinol, hydroxysteroids, ethanol, aliphatic alcohols and lipid peroxidation products. Localized to the cytoplasm and expressed in the stomach and liver, ADH6 catalyzes the reversible oxidation of alcohols to their corresponding aldehydes or ketones and is able to bind two zinc ions as cofactors. ADH6 contains a glucocorticoid response element upstream of its 5' UTR which is thought to be a steroid binding site, suggesting that expression of ADH6 may be under hormonal control. Multiple isoforms of ADH6 exist due to alternative splicing events.

## REFERENCES

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- Osier, M.V., et al. 2002. A global perspective on genetic variation at the ADH genes reveals unusual patterns of linkage disequilibrium and diversity. *Am. J. Hum. Genet.* 71: 84-99.
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- Luo, X., et al. 2006. Diplotype trend regression analysis of the ADH gene cluster and the ALDH2 gene: multiple significant associations with alcohol dependence. *Am. J. Hum. Genet.* 78: 973-987.
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## CHROMOSOMAL LOCATION

Genetic locus: ADH6 (human) mapping to 4q23.

## SOURCE

ADH6 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ADH6 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.

## 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-70202 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ADH6 (N-14) is recommended for detection of ADH6 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)], 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).

Suitable for use as control antibody for ADH6 siRNA (h): sc-72449, ADH6 shRNA Plasmid (h): sc-72449-SH and ADH6 shRNA (h) Lentiviral Particles: sc-72449-V.

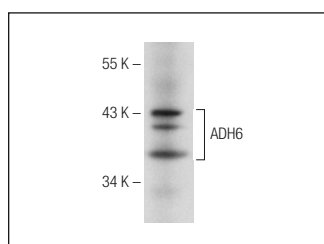
Molecular Weight of ADH6: 39 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

## 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) 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: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

## DATA



ADH6 (N-14): sc-70202. Western blot analysis of ADH6 expression in rat liver tissue extract.

## 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.