

Aldh3A2 Antibody

Aldh3A2: Aldehyde dehydrogenase family3 member A2, fatty aldehyde dehydrogenase, FALDH, ALDH10

CATALOG NO.: 4789

BACKGROUND:

Aldh3A2 is a member of the aldehyde dehydrogenase superfamily, a group of NAD(P)(+)-dependent enzymes that catalyze the oxidation of a wide spectrum of aliphatic and aromatic aldehydes (reviewed in 1). Aldehyde dehydrogenase enzymes are thought to play a major role in the detoxification of aldehydes generated by alcohol metabolism and lipid peroxidation. Aldh3A2 catalyzes the oxidation of long-chain aliphatic aldehydes to fatty acids. Mutations in the Aldh3A2 gene cause Sjogren-Larsson syndrome, an inherited neurocutaneous disorder. Patients with this disorder display ichthyosis, mental retardation and spastic diplegia. The pathogenesis of the cutaneous and neurological symptoms is thought to result from abnormal lipid accumulation in the membranes of skin and brain, the formation of aldehyde Schiff base adducts with amine-containing lipids or proteins, or defective eicosanoid metabolism (2). At least four isoforms of Aldh3A2 are known to exist. This antibody is predicted to have no cross-reactivity to Aldh3A1.

SOURCE:

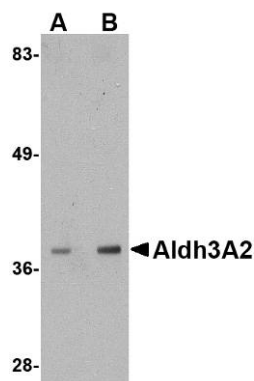
Rabbit polyclonal Aldh3A2 antibody was raised against a 14 amino acid peptide near the carboxy terminus of the human Aldh3A2 (GenBank accession no. NP_001026976).

APPLICATION:

Aldh3A2 antibody can be used for detection of Aldh3A2 by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user.) Mouse liver tissue lysate can be used as positive control. Aldh3A2 antibody is human and mouse reactive. **This product is for research use only.**

STORAGE:

Aldh3A2 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of Aldh3A2 in mouse liver lysate with Aldh3A2 antibody at (A) 1 and (B) 2 µg/ml.

RELATED PRODUCTS:

Blocking peptide, Catalog No. **4789P**.
Mouse Liver Tissue Lysate, Catalog No. **1404**.
Aldh3A1 Antibody, Catalog No. **4787**.

REFERENCES:

1. Vasiliou V and Pappa A. Polymorphisms of human aldehyde dehydrogenases. Consequences for drug metabolism and disease. *Pharmacology* 2000; 61:192-8.
2. Rizzo WB. Sjogren-Larsson syndrome: molecular genetics and biochemical pathogenesis of fatty aldehyde dehydrogenase deficiency. *Mol. Genet. Metab.* 2007; 90:1-9. (08-01D)