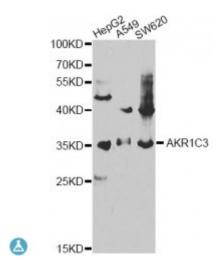


Anti-AKR1C3 Antibody



Description

This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ), and the oxidation of 9alpha,11beta-PGF2 to PGD2. It may play an important role in the pathogenesis of allergic diseases such as asthma, and may also have a role in controlling cell growth and/or differentiation. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. Three transcript variants encoding different isoforms have been found for this gene.

Model STJ115529

Host Rabbit

Reactivity Human, Rat

Applications IF, IHC, WB

Immunogen Recombinant fusion protein containing a sequence corresponding to amino

acids 1-323 of human AKR1C3 (NP_003730.4).

Gene ID 8644

Gene Symbol <u>AKR1C3</u>

Dilution range WB 1:500 - 1:2000

IHC 1:50 - 1:200 IF 1:50 - 1:200 **Tissue Specificity** Expressed in many tissues including adrenal gland, brain, kidney, liver, lung,

mammary gland, placenta, small intestine, colon, spleen, prostate and testis, The dominant HSD in prostate and mammary gland, In the prostate, higher levels in epithelial cells than in stromal cells, In the brain, expressed in medulla, spinal cord, frontotemporal lobes, thalamus, subthalamic nuclei and amygdala, Weaker expression in the hippocampus, substantia nigra and

caudate

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name Aldo-keto reductase family 1 member C3

Molecular Weight 36.853 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:386OMIM:603966Reactome:R-HSA-193368

Alternative Names Aldo-keto reductase family 1 member C3

Function Catalyzes the conversion of aldehydes and ketones to alcohols, Catalyzes the

reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ) and the oxidation of 9-alpha,11-beta-PGF2 to PGD2, Functions as a bi-directional 3-alpha-, 17-beta- and 20-alpha HSD, Can interconvert active androgens, estrogens and progestins with their cognate inactive metabolites,

Preferentially transforms androstenedione (4-dione) to testosterone

Cellular Localization Cytoplasm

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