

Basic Information

Product Name	Anti-AKR1C3 Antibody (Clone#21A20)	
Gene Name	AKR1C3	
Source	Rabbit	
Clonality	Monoclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, ICC/IF, IP, FCM	
Contents	500 ug/ml; Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide, 0.4-0.5 mg/ml BSA and 50% glycerol.	
Immunogen	A synthesized peptide derived from human AKR1C3	
Concentration	500 ug/ml	
Purification	Affinity-chromatography	
Observed MW	37 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-200 ImmunoPrecipitation (IP): 1:30 Flow Cytometry (FCM): 1:50	

Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Aldo-keto reductase family 1 member C3 (AKR1C3), also known as 17 β -hydroxysteroid dehydrogenase type 5 (17 β -HSD5, HSD17B5) is a key steroidogenic enzyme that in humans is encoded by the AKR1C3 gene. 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 9 α ,11 β -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.

Selected Validation Data

Western blot analysis of AKR1C3 expression in A549 cell lysate.

