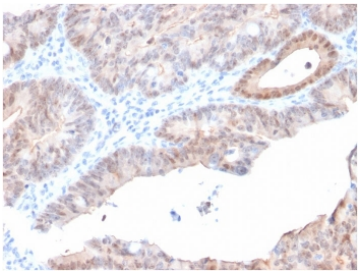
AKR1C2 Antibody / Hormone Metabolism Enzyme Antibody [clone CPTC-AKR1C2-1] (V7715)

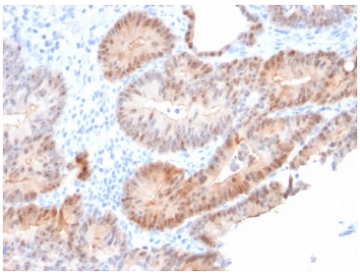
Catalog No.	Formulation	Size
V7715-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7715-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7715SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

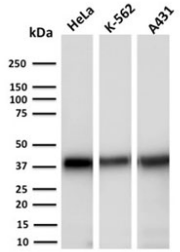
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a, kappa
Clone Name	CPTC-AKR1C2-1
Purity	Protein G affinity chromatography
UniProt	P52895
Localization	Cytoplasmic
Applications	Western blot: 2-4ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This AKR1C2 Antibody / Hormone Metabolism Enzyme Antibody is available for research use only.



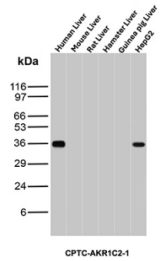
AKR1C2 Antibody Prostate Carcinoma IHC. Immunohistochemistry analysis of FFPE human prostate carcinoma tissue using AKR1C2 Antibody (clone CPTC-AKR1C2-1) shows cytoplasmic staining in tumor epithelial cells, consistent with AKR1C2 / Aldo-keto reductase family 1 member C2 localization as a cytosolic enzyme involved in hormone metabolism. The staining outlines glandular tumor structures with variable intensity across the tumor field, while surrounding stromal regions display comparatively lower signal. Hematoxylin counterstain provides nuclear contrast and tissue architecture. HIER: boil FFPE tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 10-20 min and allow to cool before testing.



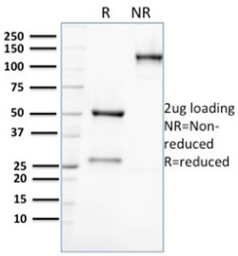
AKR1C2 Antibody Prostate Tumor Gland IHC. Immunohistochemistry analysis of FFPE human prostate carcinoma tissue using AKR1C2 Antibody (clone CPTC-AKR1C2-1) shows cytoplasmic staining in tumor epithelial cells lining glandular structures, consistent with AKR1C2 / Aldo-keto reductase family 1 member C2 localization as a cytosolic enzyme involved in hormone metabolism. The staining highlights glandular architecture with moderate intensity across epithelial cells, while surrounding stromal regions display comparatively lower signal. Hematoxylin counterstain provides nuclear contrast and tissue context. HIER: boil FFPE tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 10-20 min and allow to cool before testing.



AKR1C2 Antibody Human Cell Line Panel WB. Western blot analysis of human HeLa, K562, and A431 cell lysates using AKR1C2 Antibody (clone CPTC-AKR1C2-1) detects a band at approximately 37 kDa, consistent with the predicted molecular weight of AKR1C2 / Aldo-keto reductase family 1 member C2. The banding pattern across multiple cell lines supports reliable detection of this cytosolic enzyme, aligning with its role in hormone metabolism and steroid regulation pathways.



AKR1C2 Antibody Multi-Species Liver WB. Western blot analysis of (1) human liver, (2) mouse liver, (3) rat liver, (4) hamster liver, (5) guinea pig liver, and (6) HepG2 cell lysates using AKR1C2 Antibody (clone CPTC-AKR1C2-1) detects a band at approximately 37 kDa in human liver and HepG2 samples, consistent with the predicted molecular weight of AKR1C2 / Aldo-keto reductase family 1 member C2. Signal is not observed in the other species tested, indicating selective species reactivity for this clone. The pattern supports targeted detection of AKR1C2 in human-derived hepatic models, aligning with its role in hormone metabolism and steroid regulation pathways.



SDS-PAGE analysis of purified, BSA-free AKR1C2 antibody (clone CPTC-AKR1C2-1) as confirmation of integrity and purity.

Description

Aldo-keto reductase family 1 member C2 (AKR1C2), also known as dihydrodiol dehydrogenase 2 (DDH2), is a cytosolic enzyme that plays a central role in hormone metabolism and steroid regulation. The AKR1C2 Antibody / Hormone Metabolism Enzyme Antibody is designed to detect this enzyme in biological systems where androgen, progesterone, and prostaglandin metabolism are critical. AKR1C2 is encoded on chromosome 10p15 and is a member of the aldo-keto reductase superfamily, which catalyzes NADPH-dependent reduction of aldehydes and ketones involved in metabolic processing.

The AKR1C2 antibody, also referred to as DDH2 antibody and Aldo-keto reductase family 1 member C2 antibody in the literature, recognizes a protein localized primarily in the cytoplasm. AKR1C2 is particularly important in the metabolism of steroid hormones, where it functions in the inactivation of dihydrotestosterone and other active androgens, thereby regulating hormone signaling pathways. It also participates in prostaglandin metabolism, linking lipid signaling pathways with broader metabolic regulation.

This AKR1C2 Antibody / Hormone Metabolism Enzyme Antibody is uniquely positioned for studies focused on endocrine

regulation and hormone-dependent biological processes. In immunohistochemistry, AKR1C2 is typically observed as cytoplasmic staining in epithelial and glandular tissues, reflecting its role in intracellular metabolic processing. In western blot analysis, AKR1C2 is detected as a band corresponding to its predicted molecular weight, supporting evaluation of expression across tissues and experimental models.

AKR1C2 is expressed in liver, prostate, and other hormone-responsive tissues where steroid metabolism is active. In prostate biology, AKR1C2 contributes to androgen regulation and has been implicated in hormone-dependent disease processes. Altered expression of AKR1C2 has been associated with cancer progression and therapeutic resistance, where changes in steroid metabolism can influence tumor growth and response to treatment.

The mouse monoclonal clone CPTC-AKR1C2-1 provides consistent detection of AKR1C2 in research applications focused on hormone metabolism and enzymatic regulation. This AKR1C2 Antibody / Hormone Metabolism Enzyme Antibody is suitable for detecting AKR1C2 expression in studies of endocrine signaling, metabolic regulation, and disease-associated changes in steroid processing pathways. Its performance supports detailed evaluation of AKR1C2 in both normal physiology and pathological conditions.

This antibody supports investigation of hormone metabolism, steroid regulation, and disease-associated changes in AKR1C2 expression.

This antibody is part of a broader antibody panel offered by NSJ Bioreagents.

Application Notes

Optimal dilution of the AKR1C2 Antibody / Hormone Metabolism Enzyme Antibody should be determined by the researcher.

Immunogen

A recombinant human full-length AKR1C2 protein was used as the immunogen for the AKR1C2 antibody.

Storage

Store the AKR1C2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

AKR1C2 antibody, Aldo-keto reductase family 1 member C2 antibody, DDH2 antibody, Dihydrodiol dehydrogenase 2 antibody, AKR1C2 enzyme antibody

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