

RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Goat Anti-ALDH1A1, C-terminus

With HRP-conjugated Secondary Antibody

Catalog No. ER-14-0128

Accession Number NP 000680.2

Target Protein

Principal Names: retinaldehyde dehydrogenase 1, retinal dehydrogenase 1, aldehyde dehydrogenase, liver cytosolic, aldehyde dehydrogenase 1A1, aldehyde dehydrogenase 1, soluble, acetaldehyde dehydrogenase 1, ALDH class 1, RALDH1, PUMB1, MGC2318,, ALDH11, ALDH1, ALDH-E1,

ALDC, aldehyde dehydrogenase 1 family, member A1, ALDH1A1

Official Symbol: ALDH1A1

Accession Number(s): NP_000680.2

Human GeneID(s): 216

Non-Human GeneID(s): 11668 (mouse), 24188 (rat)

Important Comments: This antibody may cross-react with ALDH1A2 (GeneID 8854) with one residue difference from this design and with ALDH2 (GeneID 217) with two residues difference from this design.

Immunogen

Peptide with sequence C-EVKTVTVKISQKNS, from the C Terminus of the protein sequence according to NP_000680.2.

Purification and Storage

Purified from goat serum by ammonium sulphate precipitation followed by antigen affinity chromatography using the immunizing peptide.

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.

Applications Tested

Peptide ELISA: antibody detection limit dilution 1:16000.

Western blot: Approx 55kDa band observed in human liver lysates (calculated MW of 54.9kDa according to NP_000680.2). Recommended concentration: 0.03-0.1µg/ml.

IHC: This antibody has been successfully used in IHC on mouse Peyer's patches as described in the following paper: Iwata et al, Immunity. 2004 Oct;21(4):527-38.; PMID: 15485630.

Species Reactivity

Tested: Human, Mouse, Rat

Expected from sequence similarity: Human, Mouse, Rat, Dog, Cow

The products are furnished for LABORATORY RESEARCH USE ONLY.

Not for diagnostic or therapeutic use.



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Specific References

The goat polyclonal antibody used in the following papers was manufactured by us:

Yoon M, Madden MC, Barton HA.

Developmental expression of aldehyde dehydrogenase in rat: a comparison of liver and lung development.

Toxicol Sci. 2006 Feb;89(2):386-98.

PMID: 16291827

Dylla SJ, Beviglia L, Park IK, Chartier C, Raval J, Ngan L, Pickell K, Aguilar J, Lazetic S, Smith-Berdan S, Clarke MF, Hoey T, Lewicki J, Gurney AL.

Colorectal cancer stem cells are enriched in xenogeneic tumors following chemotherapy.

PLoS One. 2008 Jun 18;3(6):e2428.

PMID: 18560594

Szatmari I, Pap A, Rühl R, Ma JX, Illarionov PA, Besra GS, Rajnavolgyi E, Dezso B, Nagy L. PPARgamma controls CD1d expression by turning on retinoic acid synthesis in developing human dendritic cells.

J Exp Med. 2006 Oct 2;203(10):2351-62.

PMID: 16982809

Iwata M, Hirakiyama A, Eshima Y, Kagechika H, Kato C, Song SY.

Retinoic acid imprints gut-homing specificity on T cells.

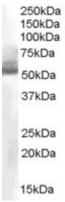
Immunity. 2004 Oct;21(4):527-38.

PMID: 15485630

Secondary Antibody Applications

Immunoassay (ELISA, Western blotting): 1:5,000-1:10,000

Image



ER-14-0128 staining (0.03μg/ml) of human liver lysate (RIPA buffer, 35μg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.