

Everest Biotech Ltd  
Cherwell Innovation Centre  
77 Heyford Park  
Upper Heyford  
Oxfordshire  
OX25 5HD, United Kingdom

[everestbiotech.com](http://everestbiotech.com)

[sales@everestbiotech.com](mailto:sales@everestbiotech.com)

[support@everestbiotech.com](mailto:support@everestbiotech.com)

Tel +44 1869 238326

Fax +44 1869 238327

**Research Use Only. Not for  
diagnostic or therapeutic use.**

Storage: For long-term storage  
keep aliquots at -20°C. (Store no  
longer than 12 months at 4°C).  
Minimize freezing and thawing.

## EB05049-T - Goat Anti-ALDH1A1 (C Terminus) Antibody - Trial

Size: 20µg specific antibody in 40µl



### 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.

Please note the [peptide](#) is available for sale.

### 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

### 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.

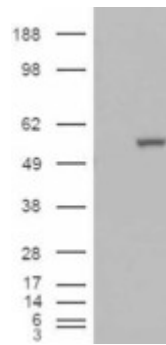
Retinoic acid imprints gut-homing specificity on T cells.

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

**PMID:** 15485630



EB05049 staining (0.03 $\mu$ g/ml) of human liver lysate (RIPA buffer, 35 $\mu$ g total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



HEK293 overexpressing ALDH1A1 (RC200723) and probed with EB05049 (mock transfection in first lane), tested by Origene.