

Anti-Human ALDH-147Sm

Catalog: 3147015B

Package Size: 100 tests

Storage: Store product at 4°C. Do not freeze.

Reactivity: Human

Clone: 44/ALDH

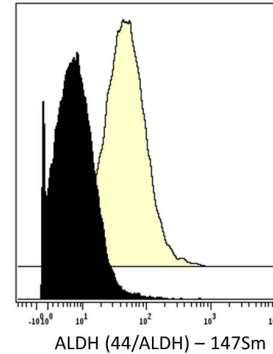
Isotype: Mouse IgG1

Formulation: Antibody stabilizer with 0.05% Sodium Azide

Technical Information

Validation: Each lot of conjugated antibody is quality control tested by CyTOF[®] analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

Recommended Usage: The suggested use is 1 µl for up to 3 X 10⁶ live cells in 100 µl. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.



Human U-87 MG cells (top) and human K-562 cells (bottom) were fixed, permeabilized, and stained with 147Sm-anti-ALDH (44/ALDH). Total viable cells are displayed in analysis.

Description

Aldehyde dehydrogenase (ALDH) is a tetrameric enzyme that oxidizes aldehydes to carboxylic acids and enables cells to resist oxidative stress. ALDH is expressed in the majority of mammalian tissues. There are multiple isoforms of ALDH; class I (cytosolic), class II (mitochondrial) and class III (microsomal). ALDH has been implicated as a cancer stem cell marker. Cells with high ALDH levels have demonstrated enhanced tumorigenicity in multiple cancer cell types. In clinical studies, high ALDH activity predicted poor survival in breast and ovarian cancer.

References

Bandura, D. R., et al. Mass Cytometry: Technique for Real Time Single Cell Multitarget Immunoassay Based on Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. *Analytical Chemistry* 81:6813-6822, 2009.

Ornatsky, O. I., et al. Highly Multiparametric Analysis by Mass Cytometry. *J Immunol Methods* 361 (1-2):1-20, 2010.

For technical support visit fluidigm.com/support

North America +1 650 266 6100 | Toll-free: +1 866 358 4354 in the US | support.northamerica@fluidigm.com **Europe** +33 1 60 92 42 40 | support.europe@fluidigm.com

China (excluding Hong Kong) +86 21 3255 8368 | techsupportchina@fluidigm.com **Japan** +81 3 3662 2150 | techsupportjapan@fluidigm.com

All other Asian countries +1 650 266 6100 | techsupportasia@fluidigm.com **Central and South America** +1 650 266 6100 | techsupportlatam@fluidigm.com

For Research Use Only. Not for use in diagnostic procedures.

Information in this publication is subject to change without notice. **Safety data sheet information** fluidigm.com/sds **Patent and license information** fluidigm.com/legalnotices | Fluidigm, the Fluidigm logo, and CyTOF are trademarks or registered trademarks of Fluidigm Corporation in the United States and/or other countries. © 2015 Fluidigm Corporation. All rights reserved. 07/2015