

Datasheet for ABIN4886431  
**anti-ADO antibody (AA 49-261)**



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1 Image

## Overview

|                      |                                                                                                                                 |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Quantity:            | 100 µg                                                                                                                          |
| Target:              | ADO                                                                                                                             |
| Binding Specificity: | AA 49-261                                                                                                                       |
| Reactivity:          | Human, Mouse, Rat                                                                                                               |
| Host:                | Rabbit                                                                                                                          |
| Clonality:           | Polyclonal                                                                                                                      |
| Conjugate:           | This ADO antibody is un-conjugated                                                                                              |
| Application:         | Western Blotting (WB), Immunohistochemistry (IHC), Flow Cytometry (FACS),<br>Immunocytochemistry (ICC), Immunofluorescence (IF) |

## Product Details

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purpose:                    | Anti-ADO Antibody Picoband®                                                                                                                                                                                                                                                                                                                                                                                                        |
| Immunogen:                  | E. coli-derived human ADO recombinant protein (Position: E49-E261). Human ADO shares 90.1% amino acid (aa) sequence identity with mouse ADO.                                                                                                                                                                                                                                                                                       |
| Isotype:                    | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Cross-Reactivity (Details): | No cross-reactivity with other proteins.                                                                                                                                                                                                                                                                                                                                                                                           |
| Characteristics:            | Anti-ADO Antibody Picoband® (ABIN4886431). Tested in Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance. |

## Product Details

Purification: Immunogen affinity purified.

## Target Details

Target: ADO

Alternative Name: ADO ([ADO Products](#))

Background: Synonyms: 2-aminoethanethiol dioxygenase,1.13.11.19,Cysteamine dioxygenase,ADO,C10orf22,  
Tissue Specificity: Widely expressed. Highest level in placenta, liver, muscle and kidney.  
Background: Human thiol dioxygenases include cysteine dioxygenase (CDO) and cysteamine (2-aminoethanethiol) dioxygenase (ADO). CDO adds 2 oxygen atoms to free cysteine, whereas ADO adds 2 oxygen atoms to free cysteamine to form hypotaurine. It is demonstrated that mouse Ado has strong and specific dioxygenase activity in vitro towards cysteamine but not cysteine. Recombinant Ado was shown to bind iron. Overexpression of Ado in HepG2/C3A cells increased the production of hypotaurine from cysteamine. Similar results were found with human ADO. When endogenous expression of ADO was reduced by RNA-mediated interference, hypotaurine production decreased. It is also noted that the demonstration of high levels of ADO in brain challenges the previous assumption that most of the taurine in the brain is a consequence of CDO activity.

Molecular Weight: 28 kDa, 30 kDa

## Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat  
Immunohistochemistry (Paraffin-embedded Section), 2-5 µg/mL, Mouse, Rat  
Immunocytochemistry/Immunofluorescence, 2 µg/mL, Human  
Flow Cytometry (Fixed), 1-3 µg/1×10<sup>6</sup> cells, Human1. Dominy, J. E., Jr., Simmons, C. R., Hirschberger, L. L., Hwang, J., Coloso, R. M., Stipanuk, M. H. Discovery and characterization of a second mammalian thiol dioxygenase, cysteamine dioxygenase.J. Biol. Chem. 282: 25189-25198, 2007.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB.

Restrictions: For Research Use only

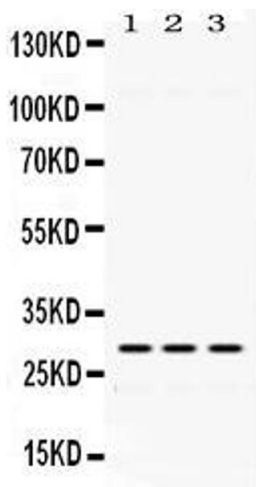
## Handling

Format: Lyophilized

## Handling

|                    |                                                                                                                                                                                                          |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reconstitution:    | Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.                                                                                                                                   |
| Concentration:     | 500 µg/mL                                                                                                                                                                                                |
| Buffer:            | Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.                                                                                                                          |
| Preservative:      | Sodium azide                                                                                                                                                                                             |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.                                                                                   |
| Handling Advice:   | Avoid repeated freezing and thawing.                                                                                                                                                                     |
| Storage:           | 4 °C,-20 °C                                                                                                                                                                                              |
| Storage Comment:   | Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month.<br>It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles. |

## Images



### Western Blotting

**Image 1.** Western blot analysis of ADO expression in rat testis extract ( Lane 1), mouse kidney extract ( Lane 2) and HELA whole cell lysates ( Lane 3). ADO at 30KD was detected using rabbit anti- ADO Antigen Affinity purified polyclonal antibody (Catalog # ) at 0.5 µg/mL. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1002).