abcam

BECKMAN COULTER

## ab326201

# SNv428 Anti-IDH2 antibody [EPR7576]

Rabbit Recombinant Monoclonal IDH2 antibody - conjugated to SNv428.
Suitable for Flow Cyt(Intra) and reacts with Human samples.

This is a Beckman Coulter product distributed by Abcam

Recombinant | RabMAb | KO Validated

## Key facts

| | |
|---|---|
| **Isotype** | IgG |
| **Host species** | Rabbit |
| **Conjugation** | SNv428 |
| **Excitation/Emission** | Ex: 405nm, Em: 428nm |
| **Storage buffer** | pH: 7.4 Preservative: 0.1% Sodium azide Constituents: PBS, 0.2% BSA, 0.02% Pluronic F-68 |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | EPR7576 |
| **Purification technique** | Affinity purification Protein A |
| **Concentration** | 0.2 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

## Flow Cyt (Intra)

### Tested

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1/1000 |
| **Notes** | - |

## Target data

See full target information IDH2

| | |
|---|---|
| **Function** | Plays a role in intermediary metabolism and energy production (PubMed:19228619, PubMed:22416140). It may tightly associate or interact with the pyruvate dehydrogenase complex (PubMed:19228619, PubMed:22416140). |

## Storage

| | |
|---|---|
| **Shipped at conditions** | Blue Ice |
| **Appropriate short-term storage duration** | 1-2 weeks |
| **Appropriate short-term storage conditions** | +4°C |
| **Appropriate long-term storage conditions** | +4°C |
| **Aliquoting information** | Upon delivery aliquot |
| **Storage information** | Avoid freeze / thaw cycle |

## Notes

**What are the advantages of a recombinant monoclonal antibody?**
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

**Patented technology**
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For

details on our patents, please refer to RabMAb® patents.

This is a Beckman Coulter product distributed by Abcam.

The SuperNova dye included in this product is provided under an intellectual property license from Beckman Coulter Life Sciences. As this product contains the SuperNova dye, the purchase of this product conveys to the buyer the non-transferable right to use the purchased product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity).

## Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

| | |
|---|---|
| **Activity summary** | Isocitrate dehydrogenase 2 (IDH2) is an enzyme that converts isocitrate to alpha-ketoglutarate in the citric acid cycle through oxidative decarboxylation. IDH2 also known as NADP-dependent isocitrate dehydrogenase has a molecular weight of about 51 kDa. This protein expresses in the mitochondria serving an important role in cellular energy production and intermediary metabolism. By facilitating this conversion IDH2 impacts cellular respiration and energy balance. |
| **Biological function summary** | The IDH2 enzyme facilitates cellular metabolism by producing NADPH critical for biosynthesis and antioxidant defense. It functions within the oxidative decarboxylation of isocitrate providing reducing equivalents to keep cellular redox balance. Although not part of a larger enzymatic complex IDH2 acts synergistically with other metabolic enzymes to maintain cellular biochemical pathways. |
| **Pathways** | The IDH2 protein participates in the citric acid cycle and redox homeostasis. IDH2 contributes to the tricarboxylic acid (TCA) pathway coupling with other TCA components such as citrate synthase and aconitase. Within the redox pathway it influences glucose metabolism via its link with enzymes like NADPH oxidase ensuring a steady supply of NADPH for biosynthetic reactions. |
| **Associated diseases and disorders** | The IDH2 protein links to certain cancers like acute myeloid leukemia (AML) due to mutations such as IDH2 R140Q and IDH2 R172K which lead to the production of oncometabolite 2-hydroxyglutarate. This oncometabolite influences epigenetic regulation and cellular differentiation. IDH2 mutations often associate with altered tumor suppressor pathways involving proteins like TP53 contributing to tumorigenesis and impaired cellular differentiation. |

## Product promise

**Tested**

We have tested this species and application combination and it works. It is covered by our product promise.

**Expected**

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

**Predicted**

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

**Not recommended**

We do not recommend this combination. It is not covered by our product promise.

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We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

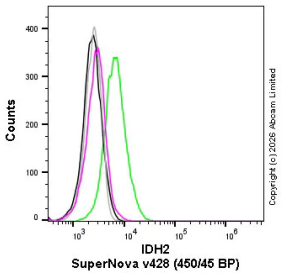
In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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## 1 product image

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### Flow Cytometry (Intracellular) - SNv428 Anti-IDH2 antibody [EPR7576] (ab326201)

IDH2 Flow Cytometry (Intracellular) staining using rabbit Anti-IDH2 antibody

Flow cytometry overlay histogram showing wild-type Jurkat (green line) and IDH2 knockout Jurkat stained with ab326201 (magenta line). The cells were fixed with 80% methanol (5 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10% normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab326201) (1x 106 in 100µl at 0.2 µg/ml (1/1000)) for 30min at 22°C.Unstained control in Jurkat WT cells (black line) and Jurkat-IDH2 KO cells (grey line) was also included. Acquisition of >5000 events were collected using a 100 mW Violet laser (405nm) and 450/45 bandpass filter.This data was acquired using a Beckman Coulter CytoFlexLX flow cytometer.

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