

## Product datasheet for AP21327BT-N

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Isocitrate dehydrogenase / IDH Rabbit Polyclonal Antibody

### **Product data:**

Product Type: Primary Antibodies

Applications: ELISA, ID, IF, IP, R, WB

**Recommended Dilution:** This product is intended for use in precipitating and non-precipitating antibody-binding

assays (such as e.g., ELISA and Western blotting and Immunofluorescence or Histochemical techniques), to prepare an insoluble immuno-affinity adsorbent, for labelling with a marker

of choice.

**Working Dilutions:** 

Non-precipitating antibody-binding techniques: 1/1,000-1/15,000.

Reactivity: Porcine
Host: Rabbit
Isotype: IgG

Clonality: Polyclonal

**Immunogen:** Isocitrate Dehydrogenase isolated and purified from Porcine heart.

Freund's complete adjuvant is used in the first step of the immunization procedure.

**Specificity:** Isocitrate Dehydrogenase isolated and purified from Porcine heart.

The reagents were evaluated for potency, purity and specificity using most or all of the following techniques: Immunoelectrophoresis, Cross-Immunoelectrophoresis, Single Radial

Immunodiffusion (Ouchterlony), block titration, ELISA, Immunoblotting and enzyme

inhibition.

Cross-reactivities against enzymes of other sources may occur but have not been

determined.

**Formulation:** PBS, pH 7.2 without preservatives and foreign proteins

Label: Biotin

State: Lyophilized hyperimmune IgG fraction

Molar radio: Biotin/IgG ~6.5

**Reconstitution Method:** Restore by adding 1.0 ml sterile distilled water

**Concentration:** lot specific

**Purification:** Ammonium Sulphate Precipitation and Ion Exchange Chromatography

**Conjugation:** Biotin





### Isocitrate dehydrogenase / IDH Rabbit Polyclonal Antibody - AP21327BT-N

**Storage:** Store the antibody lyophilized at 2-8°C and reconstituted at 2-8°C for one week or (in aliquots)

at -20°C for longer.

If a slight precipitation occurs upon storage, this should be removed by centrifugation.

**Stability:** Shelf life: one year from despatch.

Database Link: P20304

**Background:** Isocitrate dehydrogenase is an enzyme involved in the citric acid cycle. It is 416 amino acids

long with a molecular weight of approximately 45 kDa.

Isocitrate dehydrogenase enzymes catalyze the oxidative decarboxylation of isocitrate to produce alfa ketoglutarate. The human genome has 5 IDH genes coding for 3 IDH enzymes. The IDH1 and IDH2 require nicotinamide adeninedinucleotide phosphate (NADP) as cosubstrate, whereas IDH3 require nicotinamide adenine dinucleotide (NAD). The IDH2 and 3 are localized in mitochondria and are actively involved in the citric acid cycle (TCA) for energy production in contrast, IDH1 is localized in cytoplasm and peroxisomes where it generates NADPH, reduced form of NADP for biosynthetic and other types of reaction. Since alfa KG and NADPH both are intermediately substrate for a number of cellular process, which allows the

possibility of oncogenic or tumor suppressive activities of IDH1.

Synonyms: PICD, Cytosolic NADP-isocitrate dehydrogenase, ICDH, IDP, Oxalosuccinate decarboxylase