

## Isovaleryl-CoA dehydrogenase/IVD Monoclonal Antibody

catalog number: AN200143P

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

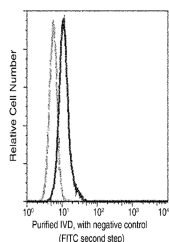
### Description

|                     |  |
|---------------------|--|
| <b>Reactivity</b>   | Human  |
| <b>Immunogen</b>    | Recombinant Human Isovaleryl-CoA dehydrogenase / IVD protein |
| <b>Host</b>         | Mouse  |
| <b>Isotype</b>      | IgG2b  |
| <b>Clone</b>        | 13B6   |
| <b>Purification</b> | Protein A  |
| <b>Buffer</b>       | 0.2 µm filtered solution in PBS                              |

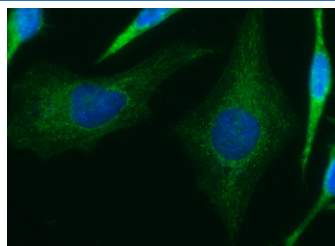
### Applications

| Applications | Recommended Dilution    |
|--------------|-------------------------|
| WB           | 1:500-1:1000            |
| FCM          | 1:100-1:500             |
| ICC/IF       | 1:100-1:500             |
| IP           | 0.1-0.5 µL/mg of lysate |

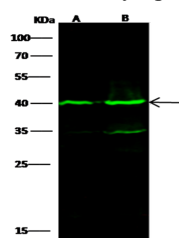
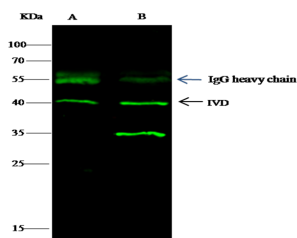
### Data



Flow cytometric analysis of Human IVD expression on HeLa cells. The cells were stained with purified anti-Human IVD, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.



Immunofluorescence analysis of Human IVD in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with Mouse anti-Human IVD Monoclonal Antibody (1:300) at 37°C 1 hour. Then cells were stained with the Alexa Fluor® 488-conjugated Goat Anti-mouse IgG secondary antibody (green) and counterstained with DAPI for nuclear staining (blue). Positive staining was localized to cytoplasm.



### For Research Use Only

Immunoprecipitation analysis using 0.5 µL anti-IVD mouse Monoclonal Antibody and 15 µl of 50 % Protein G agarose.

Western blot was performed from the immunoprecipitate using IVD mouse Monoclonal Antibody at a dilution of 1:500. Lane A:0.5 mg Jurkat Whole Cell Lysate, Lane B:0.5 mg A549 Whole Cell Lysate

**Observed-MW:40 kDa**

**Calculated-MW:47 kDa**

Western Blot with Isovaleryl-CoA dehydrogenase / IVD Monoclonal Antibody at dilution of 1:500. Lane A: Jurkat

Whole Cell Lysate, Lane B: Hela Whole Cell Lysate, Lysates/proteins at 30 µg per lane.

**Observed-MW:40 kDa**

**Calculated-MW:47 kDa**

## Preparation & Storage

### Storage

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.

### Shipping

Ice bag

## Background

Isovaleryl-CoA dehydrogenase (IVD) is a mitochondrial matrix enzyme that catalyzes the third step in leucine catabolism. The genetic deficiency of IVD results in an accumulation of isovaleric acid, which is toxic to the central nervous system and leads to isovaleric acidemia. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.