# IAP (AP-7/6/7): sc-53334



The Power to Question

## **BACKGROUND**

The intestinal alkaline phosphatase gene (ALPI) encodes a digestive brush-border enzyme, IAP (also designated ALP), which is highly upregulated during small intestinal epithelial cell differentiation. IAP, an enterocyte differentiation marker that functions to limit fat absorption, has been implicated in *trans*-cellular transport of chylomicrons and in chylomicron formation. At high pH, IAP removes phosphate groups from proteins and from the 5' end of DNA and RNA. Most mammals have four different IAP isozymes: placental, placental-like, intestinal and non tissue-specific. Non tissue-specific isozymes are found in liver, kidney and bone. Tissues with particularly high concentrations of IAP include the liver, bile ducts, placenta and bone. Damaged or diseased tissue releases enzymes into the blood, so serum IAP measurements can be abnormal in many conditions, including bone disease and liver disease. Serum IAP levels vary among ABO blood groups, and fatty acid metabolism may change among ABO blood types. Intestinal alkaline phosphatase is more prevalent in humans of blood group 0 or B.

## **REFERENCES**

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#### **SOURCE**

IAP (AP-7/6/7) is a mouse monoclonal antibody raised against IAP of calf origin.

## **PRODUCT**

Each vial contains 200  $\mu$ g lgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **APPLICATIONS**

IAP (AP-7/6/7) is recommended for detection of IAP of bovine origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of IAP: 67 kDa.

## **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

#### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

# **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

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