

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850 UNITED STATES Phone: +1-888-267-4436 Fax: +1-301-340-8606 techsupport@origene.com

## OriGene Technologies GmbH

32052 Herford GERMANY Phone: +49-5221-34606-0 Fax: +49-5221-34606-11 info-de@origene.com

Schillerstr. 5

## AM33286PU-T Monoclonal Antibody to Hepatocyte Specific Antigen (HSA) -

**Purified** 

Alternate names: HepPar-1, hepatocellular carcinoma marker, hepatocyte marker

Quantity:  $20 \mu g$  Concentration: 0.2 mg/ml

Background: Hepatoblastoma is the most common primary tumor of the liver in children. The use of

specific hepatocyte markers and also of alpha Fetoprotein or carcinoembryonic antigen are useful for the identification of normal and malignant fetal hepatocytes.

Host / Isotype: Mouse / IgG1

Recommended Isotype

Controls:

SM10P (for use in human samples), AM03095PU-N

Clone: SPM582

Immunogen: Extract of a formalin-fixed, rejected-allograft of a Human liver.

Format: State: Liquid purified IgG fraction from Bioreactor Concentrate

**Purification:** Protein A/G Chromatography

Buffer System: 10mM PBS

Preservatives: 0.05% Sodium Azide

Stabilizers: 0.05% BSA

**Applications:** Immunofluorescence: 0.5-1 μg/ml.

Immunohistochemistry on Formalin-Fixed Paraffin Sections: 1-2 µg/ml for 30 minutes

at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 1mM EDTA, pH

7.5-8.5, for 10-20 min followed by cooling at RT for 20 minutes.

**Recommended Positive Control:** Liver or Hepatocellular Carcinoma (HCC).

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: Hepatocyte Specific Antigen, also called Hepatocyte Paraffin 1 or Hep Par 1, localizes

to the mitochondria of hepatocytes. It is a sensitive marker for distinguishing hepatocellular carcinomas (HCC) from other metastatic carcinomas as well as cholangio-carcinomas. HCC's occur primarily in the stomach, but they are also found

in many other organs.

The Hepatocyte Specific Antigen may also be a useful marker for intestinal metaplasia. Reportedly, strong expression of the Hepatocyte Specific Antigen correlates with smaller tumor size and longer patient survival. Occasionally, Hepatocyte Specific Antigen is also found in gastric carcinomas as well as in a few

other non-hepatic tumors.

**Cellular Localization:** Finely granular cytoplasmic.

**Species Reactivity:** Tested: Human and Dog.



**Purified** 

**Storage:** Store undiluted at 2-8°C.

DO NOT FREEZE!

Shelf life: one year from despatch.

**General Readings:** 

1. Wennerberg AE, Nalesnik MA, Coleman WB. Hepatocyte paraffin 1: a monoclonal antibody that reacts with hepatocytes and can be used for differential diagnosis of hepatic tumors. Am J Pathol. 1993 Oct;143(4):1050-4. PubMed PMID: 7692729.

2. Ramos-Vara JA, Miller MA. Immunohistochemical characterization of canine intestinal epithelial and mesenchymal tumours with a monoclonal antibody to hepatocyte paraffin 1 (Hep Par 1). Histochem J. 2002 Aug-Sep;34(8-9):397-401. PubMed PMID: 12814187.

3. Fan Z, van de Rijn M, Montgomery K, Rouse RV. Hep par 1 antibody stain for the differential diagnosis of hepatocellular carcinoma: 676 tumors tested using tissue microarrays and conventional tissue sections. Mod Pathol. 2003 Feb;16(2):137-44.

PubMed PMID: 12591966.

Pictures: Formalin-paraffin Human Hepatocellular

Carcinoma stained with HSA Antibody Cat.-No AM33286PU (Clone SPM582).

