

AM10093PU-N**Monoclonal Antibody to Hepatocyte Specific Antigen (HSA) - Purified**

Alternate names:	HepPar-1, hepatocellular carcinoma marker, hepatocyte marker
Quantity:	0.2 mg
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:	OCH1E5
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 Frozen and Formalin-Fixed Sections: 0.5-1 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. Clone OCH1E5 is useful in studying hepatocellular tumors. It may be useful in differentiating clear cell hepatocellular carcinomas from other clear cell malignancies. It has been shown in the literature to be useful in differentiating hepatoblastoma of embryonal type from small round cell tumors of

childhood.

OCH1E5 labels an antigen in the mitochondrial fraction of the liver homogenates.

Cellular Localization: Finely granular cytoplasmic.

Species Reactivity:

Tested: Human and Dog.

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, J.A., et al. *Histochem* 2002; J. 34: 397-401.

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.