



# Mitochondria (Marker for Human Cells, Granular RCC's & Salivary Tumors); Clone 113-1 (Concentrate)

**Availability/Contents:**      Item #                      Volume  
RA0392-C.5                      0.5 ml

**Description:**


Species: Mouse  
 Immunogen: Semi-purified mitochondrial preparation  
 Clone: 113-1  
 Isotype: IgG1, kappa  
 Entrez Gene ID: Not Known  
 Hu Chromosome Loc.: Not Known  
 Synonyms: Not Known  
 Mol. Weight of Antigen: 60kDa  
 Format: 200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.  
 Specificity: This antibody recognizes a 60kDa antigen associated with the mitochondria in human cells. It can be used to stain mitochondria in cell or tissue preparations and can be used as a mitochondrial marker in subcellular fractions.  
 Background: This antibody produces a spaghetti-like pattern in normal and malignant cells. This antibody is an excellent marker for human cells in xenographic model research. It reacts specifically with human cells, including neurons and embryonic stem cells. Abundant granular eosinophilic cytoplasm is a common feature of renal oncocytoma, chromophobe renal cell carcinoma, eosinophilic variant of papillary renal cell carcinoma, and the granular variant of clear cell renal cell carcinoma (RCC). The chief reason for their distinction from one another is the difference in their biologic behavior. However, precise characterization may be difficult in some cases because of overlapping morphologic features. The immunostaining pattern with anti-mitochondrial antibody clone 113-1 has been reported as a useful discriminatory adjunct in the complex differential diagnosis of granular renal cell tumors. Moreover, salivary gland tumors usually show great variability both in their morphopathology as well as in their clinical behavior. One study highlights the usefulness of clone 113-1 to facilitate the classification of salivary tumors, an aspect that may have not only diagnostic but also prognostic implications.  
 Species Reactivity: Human. Does not react with Mouse and Rat. Others not known.  
 Positive Control: HeLa or HepG2 cells. Hepatic carcinoma.  
 Cellular Localization: Mitochondria in cytoplasm  
 Titer/ Working Dilution: Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml  
    Immunofluorescence: 0.5-1 µg/ml  
    Western Blotting: 0.25-0.5 µg/ml  
    Immunoprecipitation: 0.5-1 µg/500µg protein lysate  
 Microbiological State: This product is not sterile.

Storage: 2° C  8° C



ScyTek Laboratories, Inc.  
205 South 600 West  
Logan, UT 84321  
U.S.A.



 EmergoEurope (31)(0) 70 345-8570  
Molsnstraat 15  
2513 BH Hague, The Netherlands

**Uses/Limitations:** Not to be taken internally.  
For Research Use Only.  
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
Do not use if reagent becomes cloudy.  
Do not use past expiration date.  
Non-Sterile.

**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**

**Procedure:**

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with EDTA Buffer (10X) HIER Solution (pH 8.0) (ScyTek catalog# ETA).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).


**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).  
Do not pipette by mouth.  
Avoid contact of reagents and specimens with skin and mucous membranes.  
Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.


**References:**

1. Epstein, Alan L. and Clevenger, Charles V. In: Progress in Nonhistone Protein Research, Vol. 1, Isaac Bekhor, Ed. CRC Press, Boca Raton, FL, pp. 117-137, 1985.
2. Tickoo SK, Amin MB, Linden MD, Lee MW, Zarbo RJ. Antimitochondrial antibody (113-1) in the differential diagnosis of granular renal cell tumors. Am J Surg Pathol. 1997;21(8):922-30.
3. Vera-Sempere F, Vera-Sirera B. Usefulness of antimitochondrial antibody 113-1 in diagnosis and classification of salivary gland tumours with oncocytic differentiation. Acta Otorrinolaringol Esp. 2011;62(1):1-9.

**Warranty:**


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Storage: 2° C  8° C



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