

**AM50289PU-S****Monoclonal Antibody to Human Kappa Light Chain - Purified**

|                                      |   |
|--------------------------------------|---|
| <b>Alternate names:</b>              | HCAK1, IGKC, Ig Kappa Chain C Region, Immunoglobulin KM   |
| <b>Quantity:</b>                     | 0.1 mg  |
| <b>Concentration:</b>                | 0.2 mg/ml   |
| <b>Uniprot ID:</b>                   | <a href="#">P01601</a>  |
| <b>NCBI:</b>                         | <a href="#">9606</a>  |
| <b>GeneID:</b>                       | <a href="#">3514</a>  |
| <b>Host / Isotype:</b>               | Mouse / IgG1  |
| <b>Recommended Isotype Controls:</b> | SM10P (for use in human samples), AM03095PU-N   |
| <b>Clone:</b>                        | HP6053 + L1C1   |
| <b>Immunogen:</b>                    | Purified Human Ig kappa chain (HP6053) and Human B-Lymphoma Cells (L1C1).<br><b>Genename:</b> IGKC  |
| <b>Format:</b>                       | <b>State:</b> Liquid purified IgG fraction from Bioreactor Concentrate<br><b>Purification:</b> Protein A/G Chromatography<br><b>Buffer System:</b> 10mM PBS<br><b>Preservatives:</b> 0.05% Sodium Azide<br><b>Stabilizers:</b> 0.05% BSA  |
| <b>Applications:</b>                 | <b>Flow Cytometry:</b> 0.5-1 $\mu\text{g}/10^6$ cells.<br><b>Western Blot:</b> 0.5-1 $\mu\text{g}/\text{ml}$ .<br><b>Immunoprecipitation:</b> 1-2 $\mu\text{g}/500 \mu\text{g}$ protein lysate.<br><b>Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections:</b> 0.5-1 $\mu\text{g}/\text{ml}$ for 30 min at RT.<br>Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.<br><b>Positive Control:</b> 293T, Raji or hPBL cells, Tonsil or Spleen.<br>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user. |
| <b>Molecular Weight:</b>             | ~22.5kDa  |

**Specificity:**

This MAb is specific to kappa light chain of immunoglobulin and shows no cross-reaction with lambda light chain or any of the five heavy chains. In mammals, the two light chains in an antibody are always identical, with only one type of light chain, kappa or lambda. The ratio of Kappa to Lambda is 70:30. However, with the occurrence of multiple myeloma or other B-cell malignancies this ratio is disturbed. Antibody to the kappa light chain is reportedly useful in the identification of leukemias, plasmacytomas, and certain non-Hodgkin's lymphomas. Demonstration of clonality in lymphoid infiltrates indicates that the infiltrate is malignant.

**Cellular Localization:** Cell Surface, cytoplasmic and secreted.

**Species:** Human.

Other species not tested.

**Storage:**

Store undiluted at 2-8°C.

Shelf life: one year from despatch.

**General Readings:**

1. Takahashi H, Fujita S, Okabe H, Tsuda N, Tezuka F. Immunophenotypic analysis of extranodal non-Hodgkin's lymphomas in the oral cavity. *Pathol Res Pract.* 1993 Apr;189(3):300-11. PubMed PMID: 8332573.

2. Momose H, Chen YY, Ben-Ezra J, Weiss LM. Nodular lymphocyte-predominant Hodgkin's disease: study of immunoglobulin light chain protein and mRNA expression. *Hum Pathol.* 1992 Oct;23(10):1115-9. PubMed PMID: 1398641.

**Pictures:**

Formalin-Fixed, Paraffin-Embedded Human tonsil stained with Kappa Light Chain Antibody Cat.-No AM50289PU (Clone HP6053+L1C1). Note cell membrane & cytoplasmic staining.

