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AM50290PU-T Monoclonal Antibody to Human Kappa Light Chain - Purified

Alternate names:	HCAK1, IGKC, Ig Kappa Chain C Region, Immunoglobulin KM
Quantity:	20 µg
Concentration:	0.2 mg/ml
Uniprot ID:	P01601
NCBI:	9606
GeneID:	3514
Host / Isotype:	Mouse / IgG1
Recommended Isotype Controls:	SM10P (for use in human samples), AM03095PU-N
Clone:	KLC709
Immunogen:	Recombinant human Ig kappa chain. **Genename:** IGKC
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:	**ELISA:** Use Antibody without BSA for Coating. **Flow Cytometry:** 0.5-1 µg/10^6 cells. **Immunohistochemistry on Frozen Sections:** 0.5-1 µg/ml for 30 min at RT. ***Positive Control***: 293T, Raji or hPBL cells, Tonsil or Spleen. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Molecular Weight:	~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. Kiyotaki M, Cooper MD, Bertoli LF, Kearney JF, Kubagawa H. Monoclonal anti-Id antibodies react with varying proportions of human B lineage cells. J Immunol. 1987 Jun 15;138(12):4150-8. PubMed PMID: 3495581.
2. Nakamura T, Kubagawa H, Cooper MD. Heterogeneity of immunoglobulin-associated molecules on human B cells identified by monoclonal antibodies. Proc Natl Acad Sci U S A. 1992 Sep 15;89(18):8522-6. PubMed PMID: 1382292.

Pictures:

Formalin-Fixed, Paraffin-Embedded Human tonsil stained with Kappa Light Chain Antibody Cat.-No AM50290PU (Clone KLC709). Note cell membrane & cytoplasmic staining.