Anti-JAML [HL4E10] Standard Size Ab00949-1.1

This chimeric mouse antibody was made using the variable domain sequences of the original Rat IgG2b format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG1, Lambda

Clone Number: HL4E10

Alternative Name(s) of Target: MICA1; Junctional adhesion molecule-like; Adhesion molecule interacting with CXADR antigen 1; Dendritic cell-specific protein CREA7-1

UniProt Accession Number of Target Protein: Q86YT9

Published Application(s): crystallisation, FACS, IP, SPR, FC, IF

Published Species Reactivity: Mouse

Immunogen: An Armenian hamster was immunised with the 7-17 dendritic epidermal T cell line. Splenocytes were obtained from immunised hamsters and fused with the X63Ag8.653 myeloma cell line to generate a hybridoma.

Specificity: HL4E10 was found to be specific for JAML, as this protein was identified as the ligand for the mAb from immunoprecipitation (Witherden et al, 2010). Biochemical binding studies showed that HL4E10 bound the JAML D2 Ig domain, which was corroborated with a recent crystal structure of the JAML ECD and a HL4E10 Fab fragment (Verdino et al, 2011). HL4E10 has an affinity for JAML of 8 nM, characterised by SPR.

Application Notes: HL4E10 has been used to detect JAML by both IP and FC (Witherden et al, 2010). IF labelling showed that JAML colocalises with the T cell receptor.

Antibody First Published in: Witherden et al. The junctional adhesion molecule JAML is a costimulatory receptor for epithelial gammadelta T cell activation. Science. 2010 Sep 3;329(5996):1205-10. PMID:20813954

Note on publication: Describes the characterisation of JAML as a gammadelta T cell surface marker. mAb HL4E10 was produced and characterised herein as a JAML activator.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -

20ºC.
Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.