Anti-Haemoglobin [2A1] Standard Size Ab00956-2.0

> This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Mouse IgG2a, Kappa

Clone Number: 2A1

Alternative Name(s) of Target: Hemoglobin; Hb

UniProt Accession Number of Target Protein: P01942

Published Application(s): WB, ELISA

Published Species Reactivity: Mouse

Immunogen: Murine hybridomas were generated using spleen cells from aging (8–10 month old) NZB/W F1 animals. Hybridomas secreting antibodies reactive to murine hemoglobin were subcloned by limiting dilution and antibody isotypes determined using commercial reagents. Eight-week-old NZB/W F1 were immunized subcutaneously with 50 mg mHb antigen emulsified in Complete Fruend's Adjuvant.

Specificity: 2A1 exhibited polyreactive recognition of peptide 100-119 from the alpha subunit and peptide 100-119 frmo the beta subunit. Moreover, 2A1 bound Hb and the Hb-haptoglobin complex with equal efficiency, implying different binding sites on Hb for haptoglobin and 2A1. 2A1 was also found to distinguish between Hb and metHb.

Application Notes: 2A1 has been used to bind to mHb in Western Blots and has been found to increase the secretion of TNF-alpha from endothelial cells when co-incubated with Hb, suggesting that 2A1 induces pro-inflammatory events (Bhatnagar 2011).

Antibody First Published in: Bhatnagar et al. Serum and organ-associated anti-hemoglobin humoralautoreactivity: Association with anti-Sm responses and inflammation Eur. J. Immunol. 2011. 41: 537–548 PMID:21268022

Note on publication: Describes the presence of free hemoglobin in systemic lupus erythematosus and the investigation of anti-Hemoglobin autoimmune reactivity in patients.

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.