

Biotinylated Anti-human Calreticulin-2 Antibody

ORDERING INFORMATION

Catalog Number: BAF2927

Lot Number: WEW01

Size: 50 µg

Formulation: 0.2 µm filtered solution in PBS

with BSA

Storage: -20° C

Reconstitution: sterile 0.1% BSA in TBS

Specificity: human Calreticulin-2

Immunogen: E. coli-derived rhCalreticulin-2

Ig Type: goat IgG

Application: Western blot

Preparation

Produced in goats immunized with purified, *E. coli*-derived, recombinant human Calreticulin-2 (rhCalreticulin-2; aa 20 - 384; Accession # Q96L12). Human Calreticulin-2 specific IgG was purified by human Calreticulin-2 affinity chromatography and then biotinylated. Calreticulin-2 is a testis-specific, soluble, lectin-like molecule that participates in the protein folding and quality control cycle in the endoplasmic reticulum (ER) lumen. Mature human Calreticulin-2 has a 178 amino acid N-terminal globular domain, a 97 aa central P-domain, and a 90 aa C-terminal domain. The globular domain shows lectin activity, the P-domain binds one Ca⁺⁺ ion with high affinity, and the C-terminus binds Ca⁺⁺ and contains an RNEL ER retention motif. The amino acid sequence of Calreticulin-2 is 84%, 83% and 87% identical to that of mouse, bovine and canine Calreticulin-2, respectively.

Formulation

Lyophilized from a 0.2 μ m filtered solution in phosphate-buffered saline (PBS) containing 50 μ g of bovine serum albumin (BSA) per 1 μ g of antibody.

Reconstitution

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 $\mu g/mL$.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. Avoid repeated freeze-thaw cycles.

Specificity

This antibody has been selected for use as a detection antibody in human Calreticulin-2 western blots.

Application

Western Blot - This antibody can be used at 0.1 - 0.2 μ g/mL with the appropriate secondary reagents to detect human Calreticulin-2. The detection limit for rhCalreticulin-2 is approximately 2 ng/lane under non-reducing and reducing conditions.

Optimal dilutions should be determined by each laboratory for each application.