PRODUCT SHEET

Anti-IgM Affibody® Molecule, Unconjugated

Background

Human IgM (immunoglobulin M) is a pentameric, glycosylated protein of 900 kDa that constitutes 5-10 % of the total immunoglobulins in serum. Because of its large size, the majority of IgM remains intravascular. IgM is produced in the primary immune response and is particularly effective in complement activation. The fact that IgM has 10 antigen binding sites gives it high affinity for micro-organisms with repeating antigenic units, such as capsular carbohydrate antigens, on the bacterial surface. Decreased serum IgM levels are unusual and almost always associated with significant disease.

The Anti-IgM Affibody® molecule was selected against human IgM. Cross reactivity with other species has not been tested. The Anti-IgM Affibody® molecule is an ideal affinity ligand as capture reagent in ELISA and as capture molecule in affinity chromatography. The Anti-IgM Affibody® molecule is modified with a unique C-terminal cysteine for directed single-point chemical modification, facilitating coupling to matrices.

Product information

Product name: Anti-IgM Affibody® molecule, unconjugated
Catalog number:
500 µg: 10.1329.01.0005
5 mg: 10.1329.01.0050
Source: Recombinant protein produced in *E. coli.*
Specificity: Anti-IgM Affibody® molecule binds to human IgM. Cross reactivity with other species has not been tested.
MW: 14.0 kDa
Theroetical pI: 6.5
Purity: >98% as determined by SDS-PAGE and RP-HPLC analysis.
Tested applications: ELISA.
Conjugation: The Affibody® molecule contains a unique C-terminal cysteine ideal for directed chemical modifications. However, tail-to-tail dimers are spontaneously generated via a disulfide bridge between the C-terminal cysteines. Prior to coupling via the C-terminal cysteine, the Affibody® molecule needs to be reduced to expose the reactive cysteine residue. Recommended reducing condition is 20 mM DTT at a pH above 7.5 and incubation at room temperature for 2 hours. Remove excess DTT by passage through a desalting column, not by dialysis.
Form: Lyophilized protein. Lyophilized from 10 mM NH_4HCO_3.
Storage: +4°C is recommended for lyophilized protein. For reconstituted protein in physiological buffer, short-term storage at +4°C is recommended. For long-term storage, the protein solution should be aliquoted and then stored at -20°C.
Shipping: At ambient temperature.
Stability: There is no decrease in performance of the reconstituted Affibody® molecule (1 mg/ml in PBS) after 10 repeated freeze and thaw cycles or after storage for 2 weeks in room temperature.
Product support: www.affibody.com/shop
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