

Anti-IgE Affibody[®] Molecule, Unconjugated

BACKGROUND

Human IgE (Immunoglobulin E) is a glycosylated protein of 190 kD that constitutes less than 0.01% of the total immunoglobulin in serum. Most IgE is produced at the mucosal surfaces and it binds to high affinity IgE receptors present on mast cells, among others. Cross linking to the receptor leads to release of histamine and inflammatory mediators, resulting in dilation of vessels, smooth muscle contractions and increased permeability of capillaries. The IgE response is important for our protection against parasites but in the industrial world, high levels of IgE are usually connected to allergy.

The Anti-IgE Affibody[®] molecule is selected against human IgE. The Anti-IgE Affibody[®] molecule is an ideal affinity ligand as capture reagent in ELISA and as detection reagent in dot blot. The Anti-IgE Affibody[®] molecule is modified with a unique C-terminal cysteine for directed single-point chemical modification, facilitating labeling with fluorescent dyes, biotin or coupling to matrices.

PRODUCT INFORMATION

Product name: Anti-IgE Affibody[®] molecule, Unconjugated.

Catalog number:

1 mg: 10.0816.01.0010

Source: Recombinant protein produced in *E. coli*.

Specificity: Anti-IgE Affibody[®] molecule binds to human IgE. Cross reactivity with other species has not been tested.

MW: 13.5 kDa

Theoretical pI: 4.4

Extinction coefficient: 1 Abs₂₈₀ = 0.85 mg/ml

Purity: >98% as determined by SDS-PAGE

(Coomassie blue staining) and RP-HPLC analysis.

Tested applications: Suitable as capture reagent in ELISA and as detection reagent in dot blot.

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 NH₄HCO₃.

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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LIMITATIONS

Warranty: Affibody[®] products are warranted to meet stated product specifications and to confirm to label descriptions when used and stored properly. Unless otherwise stated, this warranty is limited to one year from date of sales for products used, handled and stored according to Affibody AB's instructions. Affibody AB's sole liability is limited to replacement of the product or refund of the purchase price. Affibody[®] products are supplied for research use only. They are not intended for medicinal, diagnostic or therapeutic use. Affibody[®] products may not be resold, modified for resale or used to manufacture commercial products without prior written approval from Affibody AB.

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