

Anti-IgA Affibody[®] Molecule, Unconjugated

BACKGROUND

Human IgA (immunoglobulin A) is a glycosylated protein of 160 kDa and is produced as a monomer or as a J-chain linked dimer. Monomeric IgA constitutes 5-15 % of the serum immunoglobulins whereas dimeric IgA is localized to mucosa surfaces such as saliva, gastrointestinal secretion, bronchial fluids and milk. Mucosal IgA plays a major role in host defence by neutralising infectious agents at mucosal surfaces. The production is usually local and antigen specific IgA producing B-cells can be found in regions under the lamina propria where they mature into dimeric IgA producing plasma cells. IgA deficiency is the most common immunodeficiency that may affect both serum and mucosal produced IgA.

The Anti-IgA Affibody[®] molecule was selected against human IgA. Cross reactivity with other species has not been tested. The Anti-IgA Affibody[®] molecule is an ideal affinity ligand as capture reagent in ELISA and as capture molecule in affinity chromatography. The Anti-IgA 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-IgA Affibody[®] molecule, unconjugated

Catalog number:

500 µg: 10.1150.01.0005

5 mg: 10.1150.01.0050

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

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

MW: 13.7 kDa

Theoretical pI: 6.5

Extinction coefficient: 1 Abs₂₈₀ = (The protein does not absorb at 280 nm)

Purity: >98% as determined by SDS-PAGE and RP-HPLC analysis.

Tested applications: Affinity Chromatography, 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 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 first be aliquoted and stored frozen 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
Affibody AB, P.O. Box 20137, SE-161 02 Bromma, Sweden. Phone: +46-8-598 838 00, Fax: +46-8-598 838 01. E-mail: biotechnology@affibody.com.

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.

AFFIBODY AB, PO Box 20137, SE-161 02 Bromma, Sweden. Phone: +46-8-598 838 00, Fax: +46-8-598 838 01, E-mail: biotechnology@affibody.com, Web: www.affibody.com/shop.
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