

Anti-HSA Affibody[®] Molecule, Unconjugated

BACKGROUND

Human serum albumin (HSA), a soluble, monomeric protein, is the most abundant protein in human serum. Normal levels are 40-60 mg/ml HSA in blood; however the amount of HSA decreases upon infection. HSA acts primarily as a carrier protein for steroids, fatty acids and thyroid hormones, and it stabilizes extracellular fluid volume. Serum albumin is produced by the liver as pre-proalbumin and it is cleaved twice before secretion.

The Anti-HSA Affibody[®] molecule binds with high affinity to native albumin from human, mouse and rat serum. The Anti-HSA Affibody[®] molecule can be used as capture reagent or detection reagent in ELISA. It is also well suited for affinity chromatography and depletion of HSA from human serum. The Anti-HSA 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-HSA Affibody[®] molecule, unconjugated.

Catalog number:

1 mg: 10.0644.01.0010

5 mg: 10.0644.01.0050

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

Specificity: Anti-HSA Affibody[®] molecule binds to native human serum albumin (HSA) and also to serum albumin of mouse and rat origin.

MW: 13.6 kDa

Theoretical pI: 5.2

Purity: >98% as determined by SDS-PAGE (Coomassie blue staining) and RP-HPLC analyses.

Tested applications: ELISA, Affinity chromatography.

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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