PRODUCT SHEET

Anti-IL-8 Affibody® Molecule, Unconjugated

Background

Interleukin 8 (IL-8) or CXCL8 is a non-glycosylated protein of 8 kDa belonging to the CXC family of chemokines. IL-8 is produced as a precursor protein of 99 amino acids and processing of the precursor results in variants of IL-8 that have various biological effects. It is produced by a number of cell types in response to inflammatory stimuli such as LPS, TNF and viruses. The IL-8 receptor belongs to the G-protein coupled receptor family and is expressed on many cell types including neutrophilic granulocytes. The role of IL-8 is primarily to attract neutrophilic granulocytes to the site of inflammation upon binding to the receptor. IL-8 causes a transient increase in cytosolic calcium levels, the release of enzymes from granules as well as enhanced expression of adhesion molecules in neutrophils.

The Anti-IL-8 Affibody® molecule was selected against human recombinant IL-8. Cross reactivity with other species has not been tested. The Anti-IL-8 Affibody® molecule is an ideal affinity ligand as capture reagent in ELISA. The Anti-IL-8 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-IL-8 Affibody® molecule, unconjugated.
Catalog number:
100 µg: 10.1312.01.0001
500 µg: 10.1312.01.0005
Source: Recombinant protein produced in E. coli.
Specificity: Anti-IL-8 Affibody® molecule binds to human IL-8. Cross reactivity with other species has not been tested.
MW: 13.8 kDa
Theroetical pI: 4.0
Purity: >98% as determined by SDS-PAGE and RPHPLC analysis.
Tested applications: ELISA.
Conjugation and immobilization:
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 between 7 and 8, and incubation at room temperature for 1-2 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 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 at room temperature.
Product support: www.affibody.com/shop
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