

Recombinant Bovine Odorant-Binding Protein

Cat. No.: AP9C270

Product Type: Animal Proteins

Size: 20 µg; 100 µg; 1 mg

Product Overview

BioVenic's Recombinant Bovine Odorant-Binding Protein, is a recombinant protein expressed from Yeast. Its predicted molecular weight is 18.5 kDa. The purity is >90% (SDS-PAGE).

Specifications

Type	Recombinant Protein
Species	Bovine
Expression System	Yeast
Purity	>90% (SDS-PAGE)
Predicted Molecular Weight	18.5 kDa
Physical State	Lyophilized
Formulation	The buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose.

Target Information

Bovine odorant-binding protein (OBP) is a small, soluble protein found in the olfactory epithelium of cattle. This protein plays a pivotal role in the initial step of the olfactory process by solubilizing and transporting odorant molecules to the olfactory receptors, enabling the detection of a variety of scents. It is crucial for the initial recognition and binding of odor molecules, which is a key function in the sense of smell. OBPs are particularly important in animals that rely heavily on their olfactory senses, and in cattle, they may contribute to foraging behavior and social interactions. Additionally, research on OBPs can have applications in veterinary medicine, such as developing diagnostic tools that leverage the olfactory system's sensitivity to certain chemical compounds.

Protein	Bovine Odorant-Binding Protein
Protein Synonym	Olfactory mucosa pyrazine-binding protein
Gene ID	785083
UniProt ID	P07435

Shipping and Storage

This product is shipped with dry ice. It is recommended to aliquot as needed and store at -80°C upon receipt. Reconstituted protein solution can be stored at 4°C for 1 week, at < -80°C for 12 months. Avoid repeated freezing and thawing.

User Note

Always centrifuge tubes before opening. Avoid mixing by vortexing or pipetting. Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Aliquot the reconstituted solution to minimise freeze-thaw cycles.

Reference

Stepanenko. *et al.* Structure and stability of recombinant Sheep odorant-binding protein: I. *Design and analysis of monomeric mutants* 2016, 4 e1933: 18.

The product is for research use only. Not for commercial, prophylactic, diagnostic, or therapeutic applications. Please determine the purpose of the product before purchasing. For further information and inquiry, please contact us.