Anti-Sea Louse

Catalogue number: 158066
Sub-type:
Images:

Contributor

Inventor: Abdo Alnabulsi
Institute: Vertebrate Antibodies Limited
Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-Sea Louse

Alternate name:

Class: Polyclonal
Conjugate: Unconjugated
Description: The salmon louse (Lepeophtheirus salmonis) is an ectoparasitic copepod with a complex life cycle. It feeds on the mucus, skin and blood of salmonid fish species, causes significant losses in salmon aquaculture. The parasite can persist on the surface of the fish without any effective control being exerted by the host immune system. Given the challenges with currently available methods, vaccination appears as an attractive, environmentally sound strategy. The challenge of developing vaccines against ectoparasites arises from the need to understand the complex molecular interactions between vertebrate hosts and ectoparasites, which require the discovery of key pathway molecules that mediate ectoparasite-host interactions. Calreticulin released by an intracellular parasite is capable of entering the cytoplasm, which is able to be processed via MHC class I. It could compete with host calreticulin for the binding of MHC molecules, and thus interfere with peptide loading and presentation. This is a valuable tool to monitor Calreticulin's role in parasite development as well as immune modulation of the host.
Purpose:
Parental cell:
Organism:
Tissue:
Model:
Gender:
Isotype:
Reactivity: Sea Louse
Selectivity:
Host:

Rabbit
Immunogen: Ovalbumin-conjugated synthetic peptide.
Immunogen UNIPROT ID:
Sequence:
Growth properties:
Production details:
Formulation:
Recommended controls: ELISA: peptide immunogen
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: Sea Louse (Lepeophtheirus salmonis) antigen (calreticulin)

Target alternate names:

Target background: The salmon louse (Lepeophtheirus salmonis) is an ectoparasitic copepod with a complex life cycle. It feeds on the mucus, skin and blood of salmonid fish species, causes significant losses in salmon aquaculture. The parasite can persist on the surface of the fish without any effective control being exerted by the host immune system. Given the challenges with currently available methods, vaccination appears as an attractive, environmentally sound strategy. The challenge of developing vaccines against ectoparasites arises from the need to understand the complex molecular interactions between vertebrate hosts and ectoparasites, which require the discovery of key pathway molecules that mediate ectoparasite-host interactions. Calreticulin released by an intracellular parasite is capable of entering the cytoplasm, which is able to be processed via MHC class I. It could compete with host calreticulin for the binding of MHC molecules, and thus interfere with peptide loading and presentation. This is a valuable tool to monitor Calreticulin's role in parasite development as well as immune modulation of the host.

Molecular weight: 41

Ic50:

Applications

Application: ELISA
Application notes:

Handling

Format: Liquid
Concentration:
Passage number:
Growth medium:

Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer: Unpurified anti-serum from rabbit preserved in 0.02% Thiomersal
Storage conditions:
Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: