

# ARG80803 Derivatized histamine ELISA Kit

Package: 96 wells Store at: 4°C

## Summary

| Product DescriptionARG80803 Derivatized histamine ELISA Kit is an Enzyme Immunoassay kit for the quantification of<br>Derivatized histamine in fresh fish, sausage, milk, wine, fish meal and champagne.Tested ReactivityOtherTested ApplicationELISATarget NameDerivatized histamineConjugationHRPConjugation NoteSubstrate: TMB and read at 450 nmSensitivity0.15 mg/lSample TypeFresh fish, sausage, milk, wine, fish meal and champagne.Standard Range0.5 - 50 ng/mlSample Volume25 μl |                     |                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------------------------------------------------|
| Tested ApplicationELISATarget NameDerivatized histamineConjugationHRPConjugation NoteSubstrate: TMB and read at 450 nmSensitivity0.15 mg/lSample TypeFresh fish, sausage, milk, wine, fish meal and champagne.Standard Range0.5 - 50 ng/ml                                                                                                                                                                                                                                                 | Product Description | , , , ,                                                   |
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| Conjugation NoteSubstrate: TMB and read at 450 nmSensitivity0.15 mg/lSample TypeFresh fish, sausage, milk, wine, fish meal and champagne.Standard Range0.5 - 50 ng/ml                                                                                                                                                                                                                                                                                                                      | Target Name         | Derivatized histamine                                     |
| Sensitivity0.15 mg/lSample TypeFresh fish, sausage, milk, wine, fish meal and champagne.Standard Range0.5 - 50 ng/ml                                                                                                                                                                                                                                                                                                                                                                       | Conjugation         | HRP                                                       |
| Sample TypeFresh fish, sausage, milk, wine, fish meal and champagne.Standard Range0.5 - 50 ng/ml                                                                                                                                                                                                                                                                                                                                                                                           | Conjugation Note    | Substrate: TMB and read at 450 nm                         |
| Standard Range 0.5 - 50 ng/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Sensitivity         | 0.15 mg/l                                                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Sample Type         | Fresh fish, sausage, milk, wine, fish meal and champagne. |
| Sample Volume 25 µl                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Standard Range      | 0.5 - 50 ng/ml                                            |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Sample Volume       | 25 μl                                                     |

## **Application Instructions**

Assay Time

30, 10, 15 min (RT/shaker)

### **Properties**

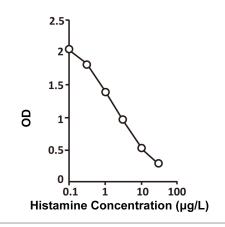
| Form                | 96 well                                                                                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storage instruction | Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components. |
| Note                | For laboratory research only, not for drug, diagnostic or other use.                                                                                                                                                                                     |

## **Bioinformation**

| Derivatized histamine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Fish meal that has been produced from materials which has been allowed to degrade prior to being processed can contain high levels of histamine and can be toxic. Elevated histamine levels (1,000 ppm) can cause gizzard erosion and black vomit in poultry. Histamine testing in fresh fish is a possible control strategy that can be used by seafood processors in their HACCP program to address the hazard of scombrotoxin formation. Histamine is a product of decomposition of histidine caused by the growth of certain bacteria in seafood. The amount of the amine that forms is a function of bacterial species, the temperature and time of exposure, and may exceed 1,000 ppm (mg/kg). Fish containing high levels of histamine has been associated with many examples of poisoning commonly referred to as "scombroid poisoning," a major health problem for consumers. Scombrotoxic fish usually contains levels of histamine is found at variable levels even within individual fish. Quality control measures designed to minimize the occurrence of scombrotoxic fish require the determination of histamine levels in the range of approximately 10 to 200 ppm. Good quality fish contain less than 10 ppm histamine, a level of |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

30 ppm indicates significant deterioration, and 50 ppm is considered to be evidence of definite decomposition. The defect action level (DAL), the level at which regulatory actions are taken for histamine is 50 ppm. The assay kit provides materials for the quantitative determination of derivatized histamine in food extracts. The derivatization is part of the preparation of the samples. By use of the acylation reagent, histamine is quantitatively derivatized into N-acylhistamine. The competitive Histamine ELISA kit uses the microtiter plate format. Histamine is bound to the solid phase of the microtiter plate. Acylated histamine and solid phase bound histamine compete for a fixed number of antiserum binding sites. When the system is in equilibrium, free antigen and free antigen-antiserum complexes are removed by washing. The antibody bound to the solid phase histamine is detected by anti-goat/peroxidase. The substrate TMB/peroxidase reaction is monitored at 450 nm. The amount of antibody bound to the solid phase histamine is inversely proportional to the histamine concentration of the sample. Highlight Related products: New ELISA data calculation tool: Simplify the ELISA analysis by GainData **Research Area** Immune System kit

#### Images



#### ARG80803 Derivatized histamine ELISA Kit standard curve image

ARG80803 Derivatized histamine ELISA Kit results of a typical standard run with optical density reading at 450nm.