Human Insulin Antibody, mAb, Mouse

Host: Mouse
Immunogen: Human recombinant Insulin expressed in yeast.
Purification: Protein A affinity column
Conjugation: Unconjugated
Version: 08/22/2011

Products information

Cat.No.	Clone	Ig Subclass
A01715	6E9F1	IgG2a, κ
A01716	5A6A4	IgG2b, κ

Description

Insulin is one of the major regulatory hormones of intermediate metabolism throughout the body. It regulates the cellular uptake, utilization, and storage of glucose, amino acids, and fatty acids and inhibits the breakdown of glycogen, protein, and fat. Proinsulin is the prohormone precursor to insulin made in pancreas. It is processed by a series of proteases to form mature insulin. Mature insulin has 35 fewer amino acids; 4 are removed altogether, and the remaining 31 forms the C-Peptide. The C-Peptide is abstracted from the center of the proinsulin sequence; the two other ends (α and β chains) remain connected by disulfide bonds. Deficiency of insulin results in diabetes mellitus, one of the leading causes of morbidity and mortality in the general population. Insulin is also present in tumors of B cell origin such as insulinoma.

GenScript Human Insulin Antibody, mAb, Mouse is produced from the hybridoma resulting from fusion of SP2/0-Ag14 myeloma and B-lymphocytes obtained from mouse immunized with human recombinant Insulin expressed in yeast.

Species Reactivity

Insulin monoclonal antibodies (5A6A4, 6E9F1) recognize native and recombinant human Insulin.

Product Buffer

PBS, pH 7.4, containing 0.02% sodium azide.

Storage

GenScript Human Insulin Antibody, mAb, Mouse should be stored at -20°C or below until use. Avoid repeated freezing and thawing cycles.

Applications

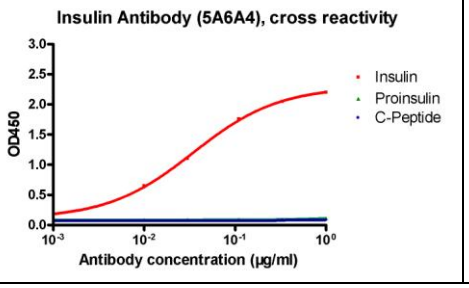
These antibodies are perfect choices for *in vitro* diagnostic assay development. And they are prepared for non-clinical research use only. The recommended pairs are based on our laboratory results.

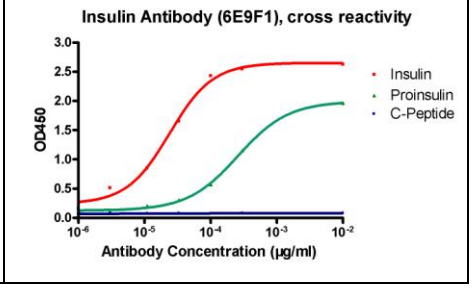
Example

Cross-reactivity of Insulin monoclonal antibodies by Indirect ELISA:

General procedures:

1. Microplate was coated with insulin, proinsulin or C-peptide respectively, followed by 3 washing cycles.
2. Incubation with mouse anti-insulin antibody followed by 3 washing cycles.
3. Incubation with goat anti-mouse IgG conjugated to peroxidase, followed by 3 washing cycles.
4. Colorimetric determination of bound peroxidase activity.





** For non-clinical research use only. **

Antibody pairs analysis of Insulin monoclonal antibodies by Sandwich ELISA:

General procedures:

1. Microplate was coated with a capture antibody against insulin, followed by 3 washing cycles.
2. Incubation with insulin followed by 3 washing cycles.
3. Incubation with peroxidase conjugated detection antibody against insulin, followed by 3 washing cycles.
4. Colorimetric determination of bound peroxidase activity.