GenScript
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Rev04
Update: Oct,19,2022

DATASHEET

Human C-peptide Antibody (4C2F10), mAb, Mouse

Cat. No.: A01784

Overview

Specificity	C-peptide monoclonal antibodies (Clone 3E8D9, 8E10D3, 4C2F10 and 8G1D12) recognize human C-peptide and don’t cross-react with proinsulin and insulin.
Host Species	Mouse
Immunogen	human C-peptide conjugated to KLH.
Conjugate	Unconjugated

Applications

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

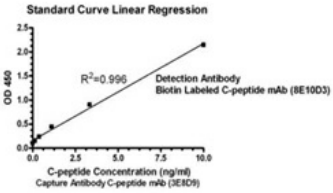
Application	Recommended Usage
Sandwich ELISA	Capture with A01784 and detected by A01726

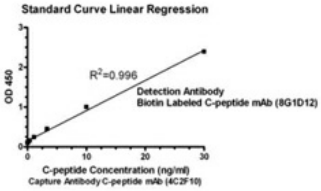
Properties

Form	Liquid
Storage Buffer	0.5 mg/ml, in PBS buffer, pH 7.4, containing 0.02% sodium azide.
Concentration	0.5 mg/ml
Storage Instructions	For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.
Purification	Protein A affinity column
Isotype	Mouse IgG1,κ

Clonality	Monoclonal
Clone ID	4C2F10

Examples





Antibody pairs analysis of C-peptide monoclonal antibodies by Sandwich ELISA:

General procedures:

1. Microplate was coated with a capture antibody against C-peptide, followed by 3 washing cycles.
2. Incubation with C-peptide followed by 3 washing cycles.
3. Incubation with Biotin conjugated detection antibody against C-peptide, followed by 3 washing cycles.
4. Incubation with Streptavidin-HRP, followed by 3 washing cycles.

Colorimetric determination of bound peroxidase activity.

Background

Target Background : C-peptide serves as an important linker between A-chain and B-chain of insulin and facilitates the efficient assembly, folding, and processing of insulin in the endoplasmic reticulum. Equimolar amounts of C-peptide and insulin are stored in secretory granules of the pancreatic beta cells and both are eventually released to the portal circulation. The sole interest in C-peptide was as a marker of insulin secretion. Newly diagnosed diabetes patients often get their C-peptide levels measured as a means of distinguishing type 1 and type 2 diabetes. C-peptide is also used for determining the possibility of gastrinomas associated with Multiple Endocrine Neoplasm syndromes (MEN 1). GenScript Human C-Peptide 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 C-peptide conjugated to KLH.

Synonyms : Human C-peptide Antibody (4C2F10), mAb, Mouse;

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.