



Anti-INS monoclonal antibody, clone 8G9 (DMAB3823MH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Monoclonal Antibody to Human Insulin
Antigen Description	Insulin is a peptide hormone composed of 51 amino acids and has a molecular weight of 5808 Da. It is produced in the islets of Langerhans in the pancreas. The name comes from the Latin insula for "island". Insulin's structure varies slightly between species of animals. Insulin from animal sources differs somewhat in "strength" (in carbohydrate metabolism control effects) in humans because of those variations. Porcine insulin is especially close to the human version.
Specificity	Insulin, human. Cross-reacts with human proinsulin, bovine insulin (30%) and porcine insulin. Does not react with free C-peptide.
Immunogen	Purified human insulin
Isotype	IgG1
Source/Host	Mouse
Species Reactivity	Human
Clone	8G9
Affinity Constant	$K_{ass}=7.5 \times 10^9 M^{-1}$
Purification	90% pure (SDS-PAGE). Protein A chromatography
Conjugate	Unconjugated
Applications	Detection of insulin in two-site enzyme immunoassay. Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded. Recommended pairs for sandwich immunoassay:

- **Capture**
[DMAB3823MH](#)
[DMABT-H4145MH](#)
- **Detection**
[DMAB3824MH](#)
[DMAB3823MH](#)

Format	Purified, Liquid
Concentration	5.6mg/ml (OD280nm, E0.1% = 1.4)
Size	1 mg
Buffer	PBS, pH 7.4
Preservative	0.1% Sodium Azide
Storage	Store at 2-8°C.

GENE INFORMATION

Gene Name	INSinsulin [Homo sapiens]
Official Symbol	INS
Synonyms	INS; insulin; ILPR; IRDN; IDDM2; MODY10; proinsulin; OTTHUMP00000011161; OTTHUMP00000011162; OTTHUMP00000196036; OTTHUMP00000196038; OTTHUMP00000217519; Insulin B chain; Insulin A chain
Entrez Gene ID	3630
Protein Refseq	NP_000198
UniProt ID	I3WAC9
Chromosome Location	11p15.5
Pathway	Adipogenesis; Arf6 trafficking; Diabetes; Folate Metabolism; IRS activation; Oocyte meiosis; SHC-related; Selenium; Senescence and Autophagy; Synthesis, Secretion, and Deacylation of Ghrelin; Type I diabetes mellitus; mTOR
Function	hormone activity; hormone activity; hormone activity; insulin receptor binding; insulin receptor binding; insulin-like growth factor receptor binding; protein binding