CATALOGUE # IV2-001

MLT™ INSULIN KIT

invitron
high sensitivity diagnostics

Catalogue No.

MLT™ Insulin Kit IV2-001

Intended Use

Invitron's MLT Insulin Assay is an immunometric assay using Molecular Light Technology Chemiluminescence for the quantitative measurement of insulin in human samples. Measurements of insulin are used in the diagnosis and management of patients with abnormalities of insulin secretion.

Test Principle

The MLT Insulin Assay is a two-site immunoassay, employing an insulin-specific solid phase antibody immobilised on microtitre wells, and a soluble antibody labelled with a chemiluminescent acridinium ester. The serum or plasma sample is incubated simultaneously with the labelled antibody solution in the microtitre well, followed by a wash step to remove unbound labelled antibody before measurement. The bound luminescence is quantified by a microtitre plate luminometer capable of in situ reagent addition. The luminescent reaction is a rapid flash type (>95% complete in 1 second) which permits the entire plate to be read in approximately 5 minutes.

Specifications

Sample Types	Serum and Plasma
Assay Time	Approx. 2 hours 15 minutes
Range	0 - 250 mU/l
Sample Size	25 µl
Sensitivity	0.25 mU/l

Specificity

Insulin	.....	100%
Intact proinsulin	.....	1.2%
C-peptide	.....	0.0%
32-33 split proinsulin	.....	1.6%
Des 31-32 split proinsulin	.....	0.8%
65-66 split proinsulin*	.....	23%
Des 64-65 split proinsulin*	.....	44%

* Studies have shown that 65-66 split proinsulin and Des 64-65 split proinsulin are not present at detectable levels in human samples.

Highlights

- ✓ Highly specific for Insulin
- ✓ Highly precise with low CVs
- ✓ Wide dynamic working range
- ✓ Therapeutic insulin analogues can be measured
- ✓ Calibrated against WHO International Standard (IRP 11/212)

Summary of Protocol

Add 100 µl Labelled Antibody to wells

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Add 25 µl Standard / Sample to respective wells

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Incubate for 2 hours at 37°C

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Wash wells x3

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Measure light output in a plate luminometer

See kit insert or email us for complete protocol.

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