Datasheet for ABIN5680714

OXM ELISA Kit

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Overview

Quantity:	96 tests
Target:	OXM
Reactivity:	Human, Rat, Cow, Dog, Goat
Method Type:	Sandwich ELISA
Detection Range:	3 pg/mL - 290 pg/mL
Minimum Detection Limit:	3 pg/mL
Application:	ELISA

Product Details

Purpose:	The Oxyntomodulin (OXM) enzyme linked immunosorbent assay (ELISA) kit provides materials for the quantitative measurement of Oxyntomodulin in K2EDTA and Li-Heparin plasma and other biological fluids.
Sample Type:	Plasma
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	0.243 pg/mL
Components:	• Oxyntomodulin Calibrator A/Sample Diluent • Oxyntomodulin Calibrators B - F (Lyophilized) • Oxyntomodulin Controls I & II • Oxyntomodulin Antibody Coated Microtitration strips • Oxyntomodulin Biotin Conjugate Ready-To-Use (RTU) • Oxyntomodulin Streptavidin-Enzyme Conjugate-Ready-To-Use (RTU)

Product Details

	• TMB Chromogen Solution • Stopping Solution • Wash Concentrate A
Material not included:	1. Microplate absorbance reader capable of absorbance measurement at 45 nm, 405 nm and 630 nm. 2. Microplate orbital shaker. 3. Microplate washer. 4. Semi-automated/manual precision pipette to deliver 10-250 µL. 5. Disposable 12 x 75 mm culture tubes. 6. Vortex mixer. 7. Deionized water. 8. Repeater Pipette

Target Details

Target:	OXM
Alternative Name:	Oxyntomodulin (OXM Products)

Application Details

Sample Volume:	25 µL
Assay Time:	2 h
Plate:	Pre-coated
Reagent Preparation:	PREPARATION OF REAGENTS 1. Oxyntomodulin Calibrators B-F and Oxyntomodulin Controls I & II: Tap and reconstitute Oxyntomodulin Calibrators B-F and Oxyntomodulin Controls I & II each with 1 mL deionized water and solubilize for 15 minutes, vortex and use. 2. Wash Solution: Dilute wash concentrate 25-fold with deionized water. The wash solution is stable for one month at room temperature when stored in a tightly sealed bottle. 3. Microtitration Wells: Select the number of coated wells required fothe assay. The remaining unused wells should be placed in the resealable pouch with a desiccant. The pouch must be resealed to protect from moisture. Dilution of samples should be performed on the same day and prior to testing. Sample Preparation (1:5 dilution): 1. For each unknown sample, label one 12 x 75 mm culture tubes or plastic vials appropriately and add 100 µL of the Calibrator A / Sample Diluent to each tube. 2. Add 25 µL of the sample to the pre-labeled vial and mix well by gentle vortex. 3. The sample is now ready to be assayed. NOTE: Calibrators and controls should NOT be diluted

Application Details

Sample Collection:	• K2EDTA plasma is the recommended sample type. • Sample handling, processing, and storage requirements depend on the brand o blood collection tube that you use. Please reference the manufacturer's instructions for guidance. Each laboratory should determine the acceptability of its own blood collection tubes and serum separation products. • Samples must be stored at -20 °C or -80 °C to avoid loss of bioactivity and contamination. • Avoid assaying lipemic, hemolyzed or icteric samples. • Avoid repeated freezing and thawing of samples. Thaw samples no more than 2 times. • For shipping, place specimens in leak proof containers in biohazard specimen bags with appropriate specimen identification and test requisition information in the outside pocket of the biohazard specimen bag. Follow DOT and IATA requirements when shipping specimens.
Assay Procedure:	Allow all specimens and reagents to reach room temperature (23 ± 2 °C) and mix thoroughly by gentle inversion before use. Calibrators, controls, and unknowns should be assayed in duplicate. 1. Prepare all samples to be assayed as per the ""Sample Preparation"" section of this package inser 2. Reconstitute Oxyntomodulin Calibrators B-F and Oxyntomodulin Controls I & II each with 1 mL deionized water as per the ""Preparationf Reagents"" section of this package insert. Mix well by gentle vortex. 3. Label the microtitration strips to be use 4. Pipette 50 µL of the Calibrators, Controls and diluted unknown (see procedure in sample preparation section) to the appropriate well 5. Add 100 µL of the Oxyntomodulin Biotin Conjugate Ready-To-Use (RTU) to each well using a repeater pipett 6. Incubate the plate, shaking at a fast speed (600-800 rpm) on an orbital microplate shaker, for 90 minutes at room temperature (23 ± 2 °C 7. Aspirate and wash each strip 5 times (350 µL/per well) with Wash Solution using an automatic microplate wash. 8. Add 100 µL of the Streptavidin-Enzyme Conjugate-RTU to each well using a repeater pipett. 9. Incubate the plate, shaking at a fast speed (600-800 rpm) on an orbital microplate shaker, for 30 minutes at room temperature (23 ± 2 °C 10. Aspirate and wash each strip 5 times (350 µL/per well) with the Wash Solution using an automatic microplate wash. 11. Add 100 µL of the TMB chromogen solution to each well using a repeater pipette. Avoid exposure to direct sunligh 12. Incubate the wells, shaking at 600-800 rpm on an orbital microplate shaker, for 8-12 min at room temperature (23 ± 2 °C NOTE: Visually monitor the color development to optimize the incubation time. 13. Add 100 µL of the Stopping Solution to each well using a repeater pipette. Read the absorbance of the solution in the wells within 20 minutes, using a microplate reader set to 450 nm. NOTE: Zero calibrator should be programmed as ""Blank"" while reading the optical density. If instrument has a wavelength correction, set the instrument to dual wavelength

Application Details

	measurement at 450 nm with background wavelength correction at 630 nm.
Calculation of Results:	NOTE: The results in this package insert were calculated by plotting the log optical density (OD) data on the y-axis and log OXM concentration on X-axis using a cubic regression curve-fit. Alternatively, log vs. log quadratic regression curve-fit can be used. Other data reduction methods may give slightly different results. 1. Calculate the mean optical density (OD) for each calibrator, Control, or Unknown. 2. Optimum results can be obtained at incubation temperature of (23 ± 2 °C 3. Plot the log of the mean OD readings for each of the Calibrators along the -axis versus log of the Oxyntomodulin concentrations in pg/mL along the x-axis, using a cubic regression curve-fit. 4. Determine the Oxyntomodulin concentrations of the Controls and diluted unknowns from the calibration curve by matching their mean OD readings with the corresponding Oxyntomodulin concentrations. 5. Any sample reading higher than the highest Calibrator should be appropriately further diluted with the 0 pg/mL (Cal. A / Sample Diluent) and re-assayed. 6. Any sample reading lower than the analytical sensitivity should be reported as such. 7. The measured concentrations of the unknown samples should be multiplieby the dilution factor (5 folds).
Restrictions:	For Research Use only

Handling

Precaution of Use:	The following precautions should be observed: a) Follow good laboratory practice. b) Use personal protective equipment. Wear lab coats and disposable glove when handling immunoassay materials. C) Handle and dispose of all reagents and material in compliance with applicable regulations
Storage:	4 °C

Publications

Product cited in:	Kim, Abbasi, Nachmanoff, Stefanakis, Kumar, Kalra, Savjani, Mantzoros et al.: "Effect of the glucagon-like peptide-1 analogue liraglutide versus placebo treatment on circulating proglucagon-derived peptides that mediate improvements in body weight, insulin secretion and action: ..." in: **Diabetes, obesity & metabolism**, Vol. 23, Issue 2, pp. 489-498, (2021) (PubMed).