Datasheet for ABIN5680720

Stanniocalcin (LOC100135946) ELISA Kit

Go to Product page

Overview

Quantity:	96 tests
Target:	Stanniocalcin (LOC100135946)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	0.85 ng/mL - 55 ng/mL
Minimum Detection Limit:	0.85 ng/mL
Application:	ELISA

Product Details

Purpose:	The Stanniocalcin-2 (STC2) enzyme linked immunosorbent assay (ELISA) kit provides materials for the quantitative measurement of Stanniocalcin-2 in human serum and other biological fluids.
Sample Type:	Plasma, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	0.033 ng/mL
Components:	• Stanniocalcin-2 Calibrator A/Sample Diluent • Stanniocalcin-2 Calibrator B-F (Lyophilized) • CTR143-II Stanniocalcin-2 Controls (Lyophilized) • Stanniocalcin-2 Antibody Coated Microtitration Strips • PAPP-A Assay Buffer • PAPP-A Conjugate Diluent

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Product Details

	• Stanniocalcin-2 Antibody-Enzyme Conjugate Concentrate • TMB Chromogen Solution • Wash Concentrate A • Stopping Solution
Material not included:	1. Microtitration plate reader capable of absorbance measurement at 450nm, 405nm and 630nm. 2. Microplate orbital shaker. 3. Microplate washer. 4. Semi-automated/manual precision pipette to deliver 10-250 µL. 5. Repeater Pipette. 6. Vortex mixer. 7. Deionized water.

Target Details

Target:	Stanniocalcin (LOC100135946)
Alternative Name:	Stanniocalcin (LOC100135946 Products)

Application Details

Sample Volume:	25 µL
Assay Time:	3 h
Plate:	Pre-coated
Reagent Preparation:	1. Wash Solution: Dilute wash concentrate 25-fold with deionized water. The wash solution is stable for one month at room temperature (23 ± 2 °C) when stored in a tightly sealed bottle. 2. Stanniocalcin-2 Antibody-Enzyme Conjugate Solution: The Stanniocalcin-2 Antibody-Enzyme Conjugate Concentrate should be diluted at a ratio of 1 part into 50 parts of the PAPP-A conjugate diluent, according to the number of wells used. For an entire plate, pipet exactly 220 µL of the Antibody-Enzyme Conjugate Concentrate into 11 mL of the PAPP-A Conjugate Diluent. NOTE: The antibody-enzyme conjugate concentrate should be freshly diluted 10-30 minutes prior to use. 3. Microtitration Wells: Select the number of coated wells required for the assay. The remaining unused wells should be placed in the resealable pouch with a desiccant. The pouch must be resealed to protect from moisture.
Sample Collection:	• Serum is the recommended sample type. • Sample handling, processing, and storage requirements depend on the brand of 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 may be stored at 4 °C if assayed within 24 hours, otherwise 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. 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. 12

Assay Procedure:

Allow all samples and reagents to reach room temperature (23 ± 2 °C). Mix reagents thoroughly by gentle inversion before use. Calibrators, controls and samples should be assayed in duplicate. NOTE: All serum samples reading higher than the highest calibrator should be thoroughly mixed and diluted in the 0 ng/mL (Calibrator A) prior to assay.

1. Mark the microtitration strips to be used.
2. Pipet 25 µL of the calibrators, controls and samples to the appropriate wells.
3. Add 50 µL of the PAPP-A Assay Buffer to each well using a repeater pipette.
4. Incubate the wells, shaking at 600-800 rpm on an orbital microplate shaker, for 2 hrs at room temperature (23 ± 2 °C).
5. Prepare the enzyme conjugate solution by diluting the antibody-enzyme conjugate concentrate with the PAPP-A conjugate diluent as described under the ""Preparation of Reagents"" section of this package insert.
6. Aspirate and wash each well 5 times (350 µL per well) with the wash solution using an automatic microplate washer.
7. Add 100 µL of the Antibody-enzyme conjugate solution to each well using a repeater pipette.
8. Incubate the wells, shaking at 600-800 rpm on an orbital microplate shaker, for 1 hr at room temperature (23 ± 2 °C).
9. Aspirate and wash each well 5 times (350 µL per well) with the wash solution using an automatic microplate washer.
10. Add 100 µL of the TMB chromogen solution to each well using a repeater pipette. Avoid direct exposure to heat and sunlight.
11. 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.
12. Add 100 µL of the Stopping solution to each well using a repeater pipette.
13. 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 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 Stanniocalcin-2 concentration on X-axis using a cubic regression curve-fit. Alternatively, log vs. log quadratic regression curve-fit can be used. Other data

Application Details

reduction methods may give slightly different results.

1. Optimum results can be obtained at incubation temperature of 23 ± 2 °C.
2. Calculate the mean OD for each calibrator, Control, or Unknown.
3. Plot the log of the mean OD readings for each of the Calibrators along the y-axis versus log of the Stanniocalcin-2 concentrations in ng/mL along the x-axis, using a cubic regression curve-fit.
4. Determine the Stanniocalcin-2 concentrations of the Controls and unknowns from the calibration curve by matching their mean OD readings with the corresponding Stanniocalcin-2 concentrations.
5. Any sample reading higher than the highest calibrator should be appropriately diluted using Stanniocalcin-2 Calibrator A and re-assayed.
6. Any sample reading lower than the analytical sensitivity should be reported as such.
7. Multiply the value by a dilution factor, if applicable.

Assay Precision:	Reproducibility of the Stanniocalcin-2 ELISA assay was determined in a study using two kit controls and two serum pools assayed in 54 replicates. Representative data were calculated based on NCCLS EP5-A guidelines. The
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 gloves when handling immunoassay materials. c) Handle and dispose of all reagents and material in compliance with applicable regulations. WARNING: Potential Biohazardous Material Handle all reagents and patient samples at a Biosafety Level 2, as recommended for any potentially infectious human material in the Centers for Disease Control/National Institutes of Health manual "Biosafety in Microbiological and Biomedical Laboratories," 5th Edition, 2007. WARNING: Potential Chemical Hazard Some reagents in this kit may contain Pro-Clean 400 and Sodium azide as a preservative. Pro-Clean 400 and Sodium azide in concentrated amounts are irritants to skin and mucous membranes. For further information regarding hazardous substances in the kit, please refer to the MSDS.
Storage:	4 °C