abcam

Product datasheet

Chloride Assay Kit ab83372

3 References 2 Images

Overview

Product name	Chloride Assay Kit
Detection method	Colorimetric
Sample type	Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
Assay type	Quantitative
Sensitivity	> 0.4 mM
Range	20 nmol/well - 120 nmol/well
Assay time	0h 20m
Product overview	Abcam's Chloride Assay Kit provides a quick, simple method for quantification of Chloride in a variety of biological samples. Blood and urine can be used directly after dilution with water. The assay is based upon the competition of Hg2+ and Fe2+ for TPTZ. The preferred Hg-TPTZ adduct exhibits no color. In the presence of Chloride, Hg2+ forms HgCl2 freeing up TPTZ which then binds the available Fe2+ giving a very intense absorbance with a λmax~ 620nm. The assay is linear in the range 20 to 120 nmol Chloride/well with detection sensitivity ~0.4 mM chloride. Visit our **FAQs page** for tips and troubleshooting.
Notes	This product is manufactured by BioVision, an Abcam company and was previously called K530 Chloride Colorimetric Assay Kit. K530-100 is the same size as the 100 test size of ab83372. Chloride is the anionic form of chlorine. It is the most common of the anions found in living organisms. Chloride ions play a variety of important physiological roles. Chloride channels are found in a variety of cells and are responsible for setting resting cell membrane potential and regulating cell volume. In the nervous system, the action of glycine and GABA are related to chloride levels in specific neurons. Chloride is also instrumental in maintaining the acid-base balance in blood. The kidneys are instrumental in closely regulating serum chloride levels. There are a number of pathologies associated with defective chloride transport; the most well-known being Cystic Fibrosis, caused by a mutation in CFTR a membrane chloride transporter.
Platform	Microplate reader

Properties

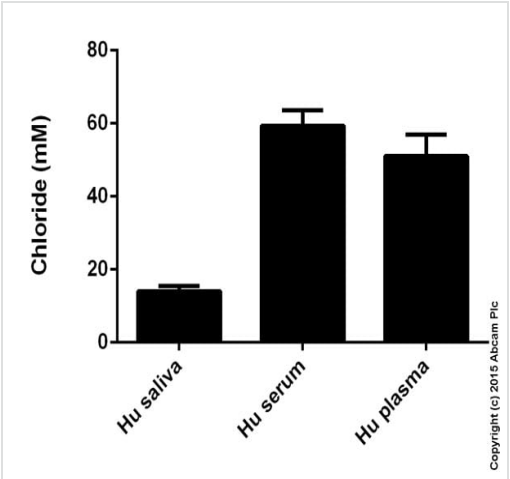
Storage instructions	Store at room temperature. Please refer to protocols.

Components	100 tests
Chloride Reagent	1 x 15ml
Chloride Standard	1 vial

Relevance

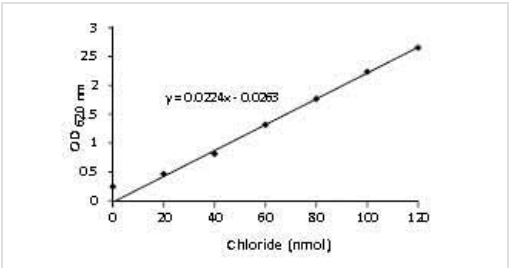
Chloride is the anionic form of chlorine. It is the most common of the anions found in living organisms. Chloride ions play a variety of important physiological roles. Chloride channels are found in a variety of cells and are responsible for setting resting cell membrane potential and regulating cell volume. In the nervous system, the action of glycine and GABA are related to chloride levels in specific neurons. Chloride is also instrumental in maintaining the acid-base balance in blood. The kidneys are instrumental in closely regulating serum chloride levels. There are a number of pathologies associated with defective chloride transport; the most well-known being Cystic Fibrosis, caused by a mutation in CFTR a membrane chloride transporter.

Images



Functional Studies - Chloride Assay Kit (ab83372)

Chloride measured in biological fluids. Samples were diluted 3-27 fold.



Functional Studies - Chloride Assay Kit (ab83372)

Chloride Standard Curve: Assays were performed following the kit protocol.

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