

Lactose Assay Kit | LAC assay kit

Lactose Assay Kit

CATALOG #
AAA44626

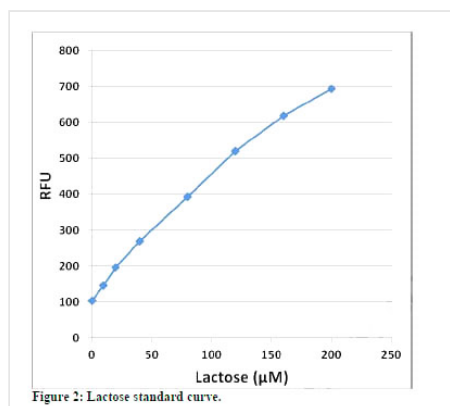
PRODUCT SYNONYMS

Lactose; Lactose Assay Kit; LAC assay kit

PRODUCT SPECIFICATIONS

Sequence Length	65
Preparation and Storage	Store the 10X Assay Buffer at room temperature Store all other components at -20 degree C The Fluorometric Probe is light sensitive and must be protected accordingly Avoid multiple freeze/thaw cycles.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for LAC assay kit	Principle of the Assay Lactose Assay Kit measures total lactose within food or biological samples. First, lactase cleaves lactose into glucose and galactose. Glucose is oxidized by glucose oxidase into D-gluconic acid plus hydrogen peroxide. The hydrogen peroxide is then detected with a highly specific fluorometric probe. Horseradish peroxidase catalyzes the reaction between the probe and hydrogen peroxide, which bind in a 1:1 ratio. Samples are compared to a known concentration of lactose standard within the 96-well microtiter plate format. Samples and standards are incubated for 45 minutes and then read with a standard 96-well fluorometric plate reader (Figure 1). Background/Introduction: Lactose is a disaccharide form of sugar made up of one glucose and one galactose monosaccharide. In animals, millimolar levels of lactose are found in breast milk. In order for lactose to be absorbed into the bloodstream, lactase (secreted from the small intestines) cleaves lactose into glucose and galactose monosaccharides. The inability to digest lactose is known as lactose intolerance, which arises from a reduction or loss in production of lactase, and is now more commonly known as "lactase deficiency". In most mammals, lactase deficiency is a normal condition that occurs shortly after weaning from breast milk as the primary food source. In humans, a significant population remains tolerant to lactose into adulthood due to the continued production of lactase in the small intestines. Some estimates suggest that 75% of the world's adult population is lactase deficient. Since the severity of lactose maldigestion symptoms can depend on the amount of lactose consumed, it is important to quantify the relative amounts of lactose in various dairy food sources. Lactose Assay Kit is a simple fluorometric assay that measures the amount of total lactose present in milk based food products or biological samples (such as blood or urine from lactating animals) in a 96-well microtiter plate format. Each kit provides sufficient reagents to perform up to 100 assays, including blanks, lactose standards, endogenous controls*, and unknown samples. Sample lactose concentrations are determined by comparison with a known lactose standard. The kit has a detection sensitivity limit of 10 uM lactose.
Product Categories/Family for LAC assay kit	Metabolism Research; Carbohydrate Metabolism; Lactose Assay Kit

NCBI AND UNIPROT INFORMATION

NCBI GI #	265681694
Molecular Weight	7,372 Da
NCBI Official Full Name	lactose, partial
UniProt Protein Name	Lactose
UniProt Gene Name	LAC
UniProt Entry Name	D1L263_BALBN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/assay-kits/lactose/44626>