# abcam

### Product datasheet

## Xanthine/Hypoxanthine Assay Kit ab155900

7 References 3 Images

Overview

Product name Xanthine/Hypoxanthine Assay Kit

**Detection method**Colorimetric/Fluorometric

Sample type Cell culture supernatant, Milk, Urine, Serum, Plasma, Other biological fluids, Tissue, Adherent

cells, Suspension cells, Tissue Homogenate

**Assay type** Enzyme activity

 $\begin{array}{ll} \text{Sensitivity} & 0.4 \ \mu\text{M} \\ \\ \text{Assay time} & 1 \text{h } 00 \text{m} \end{array}$ 

Species reactivity Reacts with: Mammals, Other species

**Product overview** Xanthine/Hypoxanthine Assay kit (ab155900) is a product where Xanthine/Hypoxanthine is

specifically oxidized by the Xanthine Enzyme Mix to form an intermediate, which reacts with Developer & Probe to form a product that can be measured colorimetrically ( $\lambda$  = 570 nm) or fluorometrically (Ex/Em = 535/587 nm). Xanthine/Hypoxanthine Assay kit is rapid, simple and sensitive. This high-throughput suitable assay kit can detect Xanthine levels as low as 0.4  $\mu$ M in

various biological samples.

Notes This product is manufactured by BioVision, an Abcam company and was previously called K685

Xanthine/Hypoxanthine Colorimetric/Fluorometric Assay Kit. K685-100 is the same size as the

100 test size of ab155900.

Xanthine, a catabolic product of purine metabolism, is present in body fluids, muscle tissue and certain plants. Structurally like caffeine, Xanthine has a stimulant effect and is used clinically to treat the congestive diseases such as asthma and chronic obstructive pulmonary disease. Xanthine is metabolized into uric acid and superoxide by Xanthine oxidase. Xanthine oxidase deficiency causes the rare genetic disorder-Xanthinuria, and leads to Xanthine accumulation in urine and blood, which ultimately progresses to renal failure. Recent studies show that Xanthine levels are elevated following ischemic injury, thus Xanthine can serve as a useful marker for tissue hypoxia. Early detection of Xanthine alteration in biological fluids is crucial for metabolic studies

and for diagnostic and therapeutic monitoring.

**Platform** Microplate reader

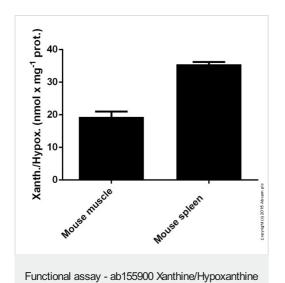
**Properties** 

**Storage instructions** Store at -20°C. Please refer to protocols.

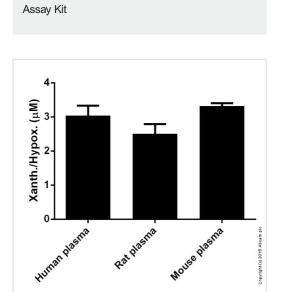
1

Components	100 tests
Assay Buffer II	1 x 25ml
Developer Solution V	1 vial
Development Enzyme Mix VIII	1 vial
OxiRed Probe	1 x 0.2ml
Xanthine Standard	1 vial

#### **Images**

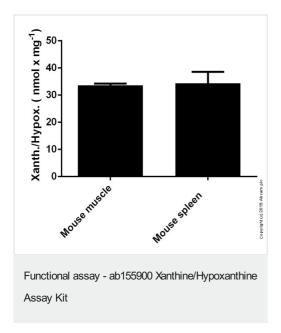


Xanthine & Hypoxanthine measured in mouse tissue lysates by fluorimetric method showing quantity (nmol) per mg of sample tested.



Xanthine & Hypoxanthine measured in biological fluids by fluorimetric method showing concentrations (micromolar).

Functional assay - ab155900 Xanthine/Hypoxanthine Assay Kit



Xanthine & Hypoxanthine measured in mouse tissue lysates by colorimetric method showing quantity (mmol) per mg of sample tested.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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