IPTG (isopropyl-thio-2-D-galactopyranoside)

For use in inducing expression from the lac promoter and its derivatives

Product Contents

IPTG	
Catalog no.	**129921**
IPTG	5 g
Product Sheet	1

Storage Conditions

IPTG should be stored immediately upon receipt at –20°C. IPTG is stable for at least 9 months when stored unopened at –20°C.

Product Description

QIAGEN IPTG is a highly pure molecular biology grade chemical for inducing expression of the lac promoter and its derivatives. It is commonly used for "blue/white screening" of bacterial colonies to distinguish bacterial or phage clones after transformation experiments (1). In combination with suitable bacterial cloning vectors, host strains, and X-Gal, IPTG provides an easy way to distinguish between positive and negative clones after transformation.

IPTG is supplied as a white crystalline powder, molecular weight 238.3.

Quality Control

In accordance with QIAGEN's ISO-certified Quality Management System, each lot of IPTG is tested against predetermined specifications to ensure consistent product quality.

Product Use Limitations

IPTG is intended for research use. No claim or representation is intended to provide information for the diagnosis, prevention, or treatment of a disease.

Safety Information

When working with chemicals, always wear a suitable lab coat, disposable gloves, and protective goggles. For more information, please consult the appropriate material safety data sheets (MSDSs). These are available online in convenient and compact PDF format at www.qiagen.com/ts/msds.asp where you can find, view, and print the MSDS for each QIAGEN kit and kit component.

24-hour emergency information

Emergency medical information in English, French, and German can be obtained 24 hours a day from:

Poison Information Center Mainz, Germany

Tel: +49-6131-19240

Procedure

Preparation of stock solution

Dissolve IPTG in water to a final concentration of 200 mg/ml. Sterilize solution using a 0.2 µm filter, dispense in aliquots, and store at –20°C. The sterilized solution is usually stable for several months when stored at –20°C.

Handling

IPTG should be used at a final concentration of 250–350 µg/ml in culture plates, top agar, or liquid culture. Alternatively, an appropriate amount of IPTG can be spread onto the surface of an agar plate and allowed to dry before inoculating with bacterial culture (1).

Reference

1. Sambrook, J. and Russell, D.W. (2001) Molecular cloning: a laboratory manual, 3rd ed., Cold Spring Harbour Laboratory Press.