# Gene to Protein Pvt. Ltd.

# X-gal (20mg/mL)

Cat # BUF26-5 Pack Size: 1 mLX5 Storage: -20°C.

## Introduction

Gene to Protein Pvt. Ltd's X-gal (20mg/mL) is a top-tier, molecular biology-grade solution used for blue/white color screening of recombinant bacterial colonies. X-gal is a chromogenic substrate for the enzyme  $\beta$ -galactosidase, and it produces a blue color when cleaved, making it an essential tool in molecular cloning and gene expression studies.

### **Product Features**

- Concentration: 20mg/mL
- Form: Clear to pale yellow solution
- Purity: ≥98%
- · Solvent: Typically dissolved in dimethyl sulfoxide (DMSO) or N,N-dimethylformamide (DMF)
- Storage Temperature: -20°C

#### Applications

- Blue/white screening of bacterial colonies for cloning
- Detection of β-galactosidase activity in various assay systems

#### **Usage Guidelines**

- Working Concentration: Typically used at a final concentration of 40 µg/mL on LB agar plates containing appropriate antibiotics.
- Preparation of Agar Plates: Allow the agar medium to cool to about 55°C after autoclaving, then add the required amount of X-gal (along with any other required additives like antibiotics or IPTG). Mix well and pour into plates.
- Storing Prepared Plates: Store the prepared plates at 4°C in the dark, as X-gal is sensitive to light.

#### **Quality Control**

- The quality and purity of X-gal (20mg/mL) are tested through standard analytical methods.
- Confirmed to be free of contaminating endonucleases, exonucleases, and proteases.

#### Precautions

- X-gal is considered toxic; handle with care, using appropriate safety equipment including gloves and eye protection.
- For research use only, not for diagnostic or therapeutic applications.

#### **Support and Inquiry**

For technical support, product inquiries, or further information regarding X-gal (20mg/mL), please contact Gene to Protein Pvt. Ltd's customer support.

#### Note

 This data provides detailed information on Gene to Protein Pvt. Ltd's 1M IPTG, including its applications, usage guidelines, and quality control measures. Please follow the specific guidelines provided and consult with technical support for any specialized needs or inquiries



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