

MUG - Galactosidase Assay kit

Ordering info:

Cat No.	Size
CA085	500 assays

Includes for 500 assays:

- 20 mM β -galactosidase substrate 4MU
- 10 mM Reference Standard
- β -galactosidase enzyme (0.1 mg/mL)
- Triton X-100
- 1M DTT
- Assay Buffer (2x)
- Stop solution



Description:

The MUG β -Galactosidase Assay Kit is an efficient, easy and highly sensitive tool to measure levels of active β -galactosidase expressed in cells transfected with plasmids expressing *Lac Z*.

Lac Z is often used as reporter gene in Transfection experiments because the β -galactosidase is highly resistant to proteolytic degradation and its activity is easily measured. β -galactosidase performs the hydrolysis of 4-methylumbelliferyl β -D-galactopyranoside (MUG) to the 4-methylumbelliferone (4MU). This MUG produces as a bright blue fluorescence that are detected at excitation/emission = 360/460 nm. The concentration of β -galactosidase is proportional to fluorescence produced.

Advantages & Features:

- ✓ **Fast, easy and convenient.**
- ✓ **Easy-to-use** method to quantify the enzyme expression in transfected cells.
- ✓ **Sensitive:** measure β -galactosidase at femtogram level.

Applications:

- ✓ Measurement of β -Galactosidase activity in the lysates of transfected cell.

Related Products:

- PBS (p.133)
- CANFAST™ Transfection Reagent (p.76)
- ONPG - Galactosidase Assay kit (p.81)
- FastCONTROL™ Dual Reporter Plasmid (p.28)

ONPG - Galactosidase Assay kit

Ordering info:

Cat No.	Size
CA080	500 assays

Includes for 500 assays:

- ONPG Substrate solution
- DTT
- Buffer Lysis
- Buffer Assay
- Buffer Stop
- β -galactosidase enzyme



Related Products:

- pOnebyOne™ Mammalian expression vectors (p.22)
- pColiExpress™ Glue Enzyme kits (p.34)
- FastCONTROL™ Dual Reporter Plasmid (p.28)
- Custom solutions (p.147)

Description:

The ONPG β -Galactosidase Assay Kit is an optimized, stable and colorimetric tool to fast measure the levels of active β -galactosidase expressed in cells transfected with plasmids expressing *Lac Z*.

Lac Z is often used reporter gene in experiments transfection because the β -galactosidase is very resistant to proteolytic degradation and its activity is easily measured. β -galactosidase performs the hydrolysis of orthonitrophenyl- β -D-galactopyranoside (ONPG) to the ortho-nitrophenol (ONP). This ONP produces as a bright yellow colour that is detected at absorbance 420 nm. The concentration of β -galactosidase is proportional to colour produced.

Advantages & Features:

- ✓ **Proven performance** to quantify high expression level of beta-Gal.
- ✓ **Very stable:** resistant to proteolytic degradation and easily assayed.
- ✓ **Convenient** for all transfection assays.
- ✓ **Versatile:** proven performance for cultured cells and tissues.
- ✓ **Rapid and easy protocol.**
- ✓ **Cost-effective.**

Applications:

- ✓ Measurement of β -Galactosidase activity in the lysates of transfected cells.

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