

Luciferase Mouse mAb

Catalog No.: A29536

Basic Information

Observed MW

61 kDa

Calculated MW

61 kDa

Category

Primary antibody

Applications

WB, ELISA

Cross-Reactivity

Firefly

CloneNo number

AMC0974

Background

Firefly luciferase (FLuc) is a ~61 kDa monomeric enzyme encoded by the luc gene, primarily expressed in the light-producing organs of fireflies such as *Photinus pyralis*. It functions as an ATP-dependent monooxygenase, catalyzing D-luciferin oxidation via a luciferyl-adenylate intermediate to yield excited-state oxyluciferin, which emits yellow-green light ($\lambda_{\max}$ ~550–570 nm) upon relaxation. Owing to its high quantum yield and favorable signal-to-background ratio, FLuc has become one of the most widely used reporter proteins in gene expression assays, ATP quantification, and in vivo bioluminescence imaging.

Recommended Dilutions

WB 1:1000 - 1:5000

ELISA Recommended starting concentration is 1 μ g/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions ($\geq 1:10000$) a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID

/

Swiss Prot

P08659

Immunogen

This information is considered to be commercially sensitive.

Synonyms

Contact

☎ | 400-999-6126

✉ | cn.market@abclonal.com.cn

🌐 | www.abclonal.com.cn

Product Information

Source

Mouse

Isotype

IgG1

Purification

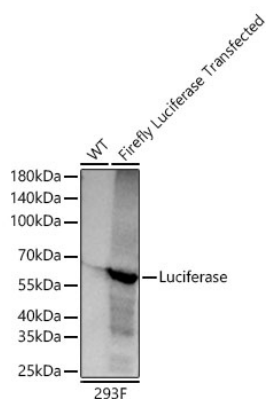
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 0.5% BSA, 50% glycerol, pH7.3

Validation Data



Western blot analysis of lysates from wild type (WT) and 293F cells transfected with Firefly Luciferase using Luciferase Mouse mAb (A29536) at 1:1000 dilution incubated overnight at 4°C
Secondary antibody: HRP-conjugated Goat anti-Mouse IgG (H+L) (AS003) at 1:10000 dilution.
Lysates/proteins: 20 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 1 s.