

Datasheet for ABIN306791 anti-Luciferase antibody





Overview

Quantity:	100 μg
Target:	Luciferase
Reactivity:	Photinus pyralis
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Luciferase antibody is un-conjugated
Application:	Western Blotting (WB)
Product Details	
Clone:	Luci17

Target Details

lgG1

Isotype:

Target:	Luciterase
Abstract:	Luciferase Products

Background:

Analysis of gene expression is most commonly assayed by transient transfection. These systems are generally based on the use of fusion genes which are inserted into cells, and the gene expression is assayed within 48 hours after introduction of DNA. Usually the fusion consists of the promoter binding site or enhancer sequence under study which is attached to a reporter gene. The amount of the reporter protein synthesized under the experimental conditions, is presumed to reflect the ability of the sequences studied to direct or promote

transcription. Several enzymes are commonly used as reporter proteins, among them are chloramphenicol acetyl transferase (CAT), -galactosidase, human growth hormone (hGH) and luciferase. Luciferase has become one of the widely used reporter enzymes. The enzyme catalyzes a bioluminescent reaction which requires the substrate luciferin as well as Mg+2 and ATP. Mixing these reagents with the cell extract containing luciferase, results in a flash of light that decays rapidly. This light can be detected by a luminometer. The total light emission is proportional to the luciferase activity of the sample. The use of an antibody to detect luciferase can provide an alternative detection assay which directly detects luciferase protein levels, and thus has the advantage that it does not require luciferase activity and is not dependent on rapid kinetics. Moreover, antibodies can detect the luciferase enzyme expression in situ, providing a means to study the localized signal sequences using luciferase as a reporter gene.

Application Details

Application Notes:

Detects luciferase protein by Western blot in C. elegans and Drosophilia melanogaster tissues, human fibroblast, mouse macrophage, kidney, liver and cortex as well as NIH3T3, Jurkat and BHR21 cell lines. Detects luciferase with little to no background signal. Positive Control: Purified luciferase protein.

Restrictions:

For Research Use only

Handling

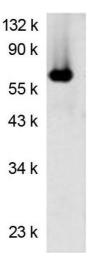
Concentration:

1 mg/ml

Storage:

-20 °C

Images



Western Blotting

Image 1. Western blot analysis using Luciferase antibody Protein