

Renilla Luciferase Rabbit mAb

Catalog No: #48665

Package Size: #48665-1 50ul #48665-2 100ul

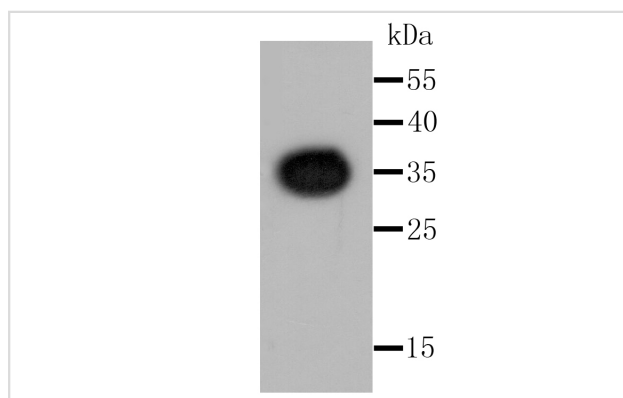
Description

Product Name	Renilla Luciferase Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal
Clone No.	SR07-830
Purification	ProA affinity purified
Applications	WB, ICC, IF
Species Reactivity	Sea pansy
Immunogen Description	Recombinant protein
Conjugates	Unconjugated
Other Names	Renilla luciferin 2 monooxygenase antibody Renilla type luciferase antibody
Accession No.	Swiss-Prot#:P27652
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

Application Details

WB: 1:500-1:2,000

Images



Western blot analysis of Renilla Luciferase on luciferase recombinant protein lysate using anti-Renilla Luciferase antibody at 1/1,000 dilution.

Background

Upon binding the substrate, the enzyme catalyzes an oxygenation, producing a very short-lived hydroperoxide that cyclizes into a dioxetanone structure, which collapses, releasing a CO₂ molecule. The spontaneous breakdown of the dioxetanone releases the energy (about 50 kcal/mole) that is necessary to generate the excited state of the coelenteramide product, which is the singlet form of the monoanion. In vivo the product undergoes the process of nonradiative energy transfer to an accessory protein, a green fluorescent protein (GFP), which results in green bioluminescence. In vitro, in the absence of GFP, the product emits blue light.

References

Note: This product is for in vitro research use only and is not intended for use in humans or animals.