10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Renilla Luciferase Antibody

Rabbit mAb
Catalog # AP90435

Product Information

Application	WB, IF, ICC
Primary Accession	P27652
Clonality	Monoclonal
Other Names	Renilla-type luciferase; Renilla luciferin 2 monooxygenase;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	36022

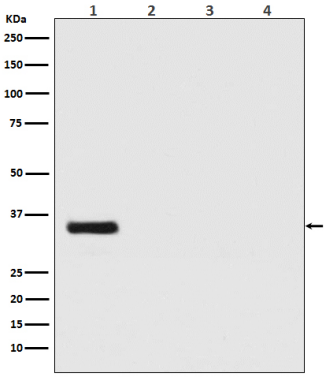
Additional Information

Dilution	WB 1:500~1:2000 ICC/IF 1:50~1:200
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from Renilla Luciferase
Description	Renilla luciferin + O2 = oxidized Renilla luciferin + CO2 + light. The Green Renilla luciferase is a 36kDa protein produced by a derivative of the wild type Renilla luciferase gene from the sea pansy, Renilla reniformis. Compared to the wild type luciferase, Green Renilla is more stable in serum and has an the emission spectrum that is shifted toward the green region. The protein provides extremely bright flash signal that decays rapidly.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	LUCI
Function	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 CO(2) 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.

Images



Western blot analysis of Renilla Luciferase expression in (1) Renilla Luciferase transfected 293 cell lysate; (2) HeLa cell lysate; (3) NIH/3T3 cell lysate; (4) C6 cell lysate.

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Immunofluorescent analysis of 293 cells transfected with Renilla Luciferase, using Renilla Luciferase Antibody .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.