

RayBiotech, Inc.

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Certificate of Analysis and Data Sheet

Rabbit Anti-Renilla reniformis Luciferase Antibody

| Г | Catalog No: | Isotype: | Species: | Accession No: |
|---|-------------|------------|--------------------|---------------|
| | 130-00005 | Rabbit IgG | Renilla reniformis | N/A |

Description

Luciferase belongs to the oxidative enzymes used in bioluminescence and is different from the photoprotein. In the luciferase reaction, luciferase acts on the appropriate substrate luciferin and light is emitted. A variety of organisms regulate their light production using different luciferases. The well-studied luciferases are mainly from fireflies and *Renilla*.

Applications

Summary of antibody applications and working conditions

| Options Functions | YES | NO | Not determined | Recommended work dilution |
|-------------------------------|-----|----|----------------|---------------------------|
| ELISA | * | | | 1:1000-5000 |
| Western Blotting | * | | | 1:1000 |
| Enzyme Immunoassay(EIA) | | | * | |
| Immunohistology - paraffin | | | * | |
| Immunohistology - resin | | | * | |
| Immunoprecipitation | | | * | |
| Flow Cytometry | | | * | |
| Neutralization | | | * | |

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application



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Preparation

Immunogen was a recombinant protein of Renilla reniformis luciferase. This antibody was produced from a rabbit immunized with the immunogen. The IgG fraction was purified from rabbit serum by ammonium sulphate precipitation, and followed by Protein A/G affinity chromatography.

Specificity

This antibody binds to Renilla reniformis. Cross reactivity with luciferase derived from other species has not yet been tested.

Reconstitution

Product is supplied as a powder obtained from lyophilization of purified antibody in PBS without preservatives. Reconstitute the antibody with sterile 1x PBS to a final concentration of 1 mg/ml.

Storage

Store at 4°C if intended for use within one month, otherwise, store at -20°C to -80°C. The lyophilized antibody is stable for at least 18 months after the date of receipt when stored at -20°C to -80°C. After reconstitution, it can be aliquoted and stored frozen at -20°C to -80°C in a manual defrost freezer for at least 6 months without detectable loss of activity. Upon reconstitution, the antibody can also be stored for 1 month at 4°C. **Please avoid freeze-thaw cycles, as this will lower the activity of the antibody.**

Related products

- 1. Recombinant Luciferase Western Blot Control (catalog #: RB-15-0003P-WBC)
- 2. Purified Recombinant Luciferase (catalog # RB-15-0003P)

Reference

Nakatsu T, et al. (2006). "Structural basis for the spectral difference in luciferase bioluminescence". Nature 440 (7082):372–6.

Baldwin TO (1996). "Firefly luciferase: the structure is known, but the mystery remains". Structure 4 (3): 223–8.