

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects human LYAR in direct ELISAs. |
| Source | Monoclonal Mouse IgG _{2B} Clone # 735838 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | <i>E. coli</i> -derived recombinant human LYAR Lys288-Lys379 Accession # Q9NX58 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|----------------------------|----------------------------------|---------------|
| Western Blot | 1 µg/mL | See Below |
| Immunocytochemistry | 8-25 µg/mL | See Below |

DATA

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| <p>Western Blot</p> | <p>Detection of Human LYAR by Western Blot. Western blot shows lysates of Ramos human Burkitt's lymphoma cell line, HT-29 human colon adenocarcinoma cell line, HEK293 human embryonic kidney cell line, and BG01V human embryonic stem cells. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human LYAR Monoclonal Antibody (Catalog # MAB6748) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for LYAR at approximately 50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p> | <p>Immunocytochemistry</p> <p>LYAR in BG01V Human Embryonic Stem Cells. LYAR was detected in immersion fixed BG01V human embryonic stem cells using Mouse Anti-Human LYAR Monoclonal Antibody (Catalog # MAB6748) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nucleoli. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p> |
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PREPARATION AND STORAGE

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| Reconstitution | Sterile PBS to a final concentration of 0.5 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

LYAR (Ly-1/CD5 antibody reactive clone) is a 45-50 kDa nucleolar protein that was named for the ability of its antibody to cross-react with Ly-1. Its function is unclear; it is known to associate with MYCN and RRP1B, the latter association giving rise to the suggestion that LYAR is involved with RNA metabolism. Human LYAR is 379 amino acids (aa) in length. It contains two C2H2-type Zn finger regions (aa 6-25 and 33-51) followed by one coiled-coil region (aa 175-219) and an NLS (aa 217-222). There are multiple Zn-binding sites and three utilized phosphorylation sites at Ser244, Ser258 and Ser276. Over aa 288-379, human LYAR shares 75% aa identity with mouse LYAR.