RNA 5’ Pyrophosphohydrolase (RppH)

**M0356S**

**200 units** 5,000 U/ml Lot: 0011208
**RECOMBINANT** Store at -20°C Exp: 8/14

**Description:** The bacterial RNA 5’ Pyrophosphohydrolase (RppH) removes pyrophosphate from the 5’ end of triphosphorylated RNA to leave a 5’ monophosphate RNA (1). The RppH protein was also known as NudH/YgdP which can split Ap5A to ADP and ATP (2).

**Source:** An E. coli strain containing a clone of the E. coli RppH gene.

Supplied in: 200 mM NaCl, 0.1 mM EDTA, 20 mM Tris-HCl (pH 7.5), 1 mM DTT, 0.01% Triton X-100 and 50% glycerol.

**Applications:**
- Convert RNA transcript (ppp-RNA) to 5’ monophosphate RNA (p-RNA) for 5’ RNA ligation or for removal by XRN-1.
- RNA 5’ end structure analysis.

**Reagents Supplied with Enzyme:**
- 10X NEBuffer 2
- 50 mM NaCl
- 10 mM Tris-HCl
- 10 mM MgCl₂
- 1 mM Dithiothreitol
- pH 7.9 @ 25°C

**Unit Definition:** One unit is the amount of enzyme that converts 1 µg 300 mer RNA transcript into a XRN-1 digestible RNA in 30 minutes at 37°C.

**Notes On Use:** Since RppH is active in the presence of Mg²⁺, it can be incubated with RNA ligase or XRN-1.

**References:**