

## RNA Ladder HighRange ready-to-use

### Features:

The ladder is designed for qualitative and quantitative analysis of RNA on agarose gels with ethidium bromide or Sybr-Green II as dyes.

### Description:

Mixture of 7 RNA transcripts from specific templates including  $\lambda$ -sequences and a fragment of the pTZ19R poly linker, re-dissolved in 1 mM EDTA (pH 6.0). The RNA-Ladder is suitable for the analysis of RNA in native or denaturing agarose gels (0.8 - 1,5 %) and polyacrylamide gels (4 – 8 %) and can be stained by ethidium bromide. The ladder is supplied in 1X Loading buffer and is **ready-to-use**.

**Concentration:** 0.25 mg RNA/ml

### 2X RNA Tracking dye (included):

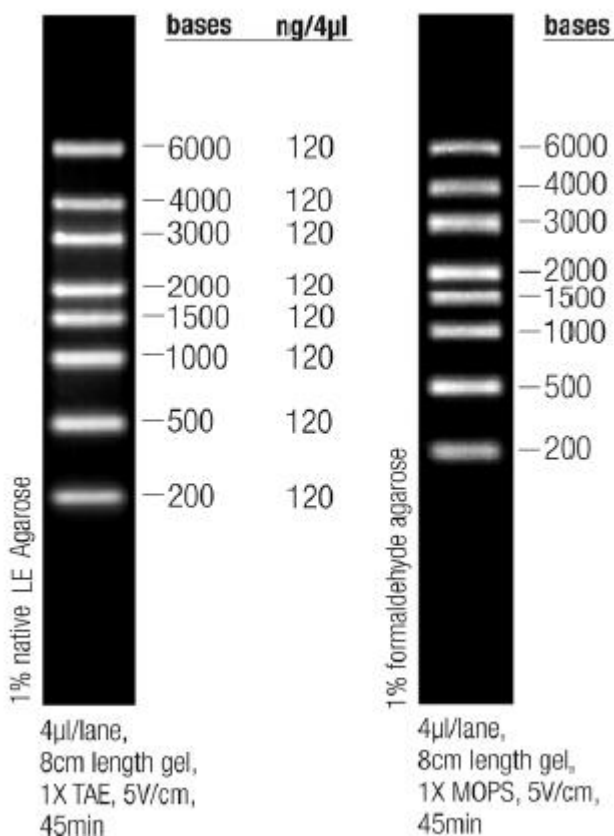
95 % formamide, 0.025 % SDS, 0.025 % bromphenol blue, 0.025 % xylene cyanol, 0.025% ethidium bromide and 0.5 mM EDTA (The 2X RNA Loading Dye contains a denaturing agent formamide. When samples are treated with this agent, RNA molecules separate according to their size both on native and denaturing agarose gels.)

**1X Loading (storage) buffer:** 10 mM potassium acetate (pH 4.5), 47.5 % formamide, 0.0125 % SDS, 0.0125 % bromophenol blue, 0.0125 % xylene cyanol, 0.0125 % ethidium bromide and 0.25 mM EDTA

**Number of bands:** 6000, 4000, 3000, 2000, 1500, 1000, 500 und 200 bases

### Quality control/results:

- Absence of ribonucleases
- Determination of RNA concentration by spectrophotometer
- free of degraded RNA and NTP's



### Electrophoresis:

- denaturing formaldehyde agarose with MOPS buffer
- denaturing polyacrylamide gel electrophoresis in TBE buffer
- native 2% agarose with TAE buffer
- denaturing glyoxal/DMSO agarose with sodium phosphate buffer

### Loading for native or denaturing agarose gels:

HighRange RNA-Ladder is pre-mixed with Loading buffer (1X)

- Use the supplied 2X RNA Loading Dye both for sample RNA and RNA ladder and mix equal volumes of the 2X RNA Loading Dye and RNA sample
- Thaw the ladder on ice and mix well by pipetting or gentle vortexing
- Use 0.5 µl (0.125 µg) per mm lane width ready-to-use RNA Ladder in fresh tube
- Vortex briefly and spin down
- Heat at 70 °C for 10 minutes
- Chill quickly on ice and load the gel

After finishing gel electrophoresis stain the gel with ethidium bromide

**Loading of equal volumes of the sample and the ladder is recommended**

**Note:** RNA is sensitive to degradation by ribonucleases. Working with any RNA Ladder of GeneOn all components have to be prepared fresh. All required tools and consumables should be treated with e.g. diethyl pyrocarbonate.

**Protect your hands with resistant gloves and your eyes with goggles!**

**Transportation:** Shipped on blue ice

**Storage:** at -20°C/ -70°C for 12 months

**Ordering information:**

Cat.-no	Description	Amount
300027	RNA Ladder LowRange, 200 - 6000 b, rtu	5 x 40 µl
300028	RNA Ladder LowRange, 200 - 6000 b, rtu	15 x 40 µl