

## Cas13a Nuclease from *Leptotrichia buccalis*

### Product Information

<b>Cat#</b>	CAS-1302
<b>Source</b>	Recombinant
<b>Description</b>	LbuCas13a (also known as C2c2) originates from the strain <i>Leptotrichia buccalis</i> . LbuCas13a is a type II VI CRISPR system effector protein, a crRNA-mediated endonuclease. Its "accessory cleavage" activity is activated when recognizing and cleaving target RNA, allowing it to non-specifically cleave single-stranded RNA (ssRNA) in the system. By designing RNA probes with fluorescent groups or other labels at both ends, CRISPR/Cas13a can be used to detect and amplify the RNA template. Results can be observed using a fluorometer or test strips.
<b>Storage</b>	Shelf life is 1 year. Storage conditions: -80°C. To avoid repeated freeze-thaw cycles, after opening, please store the Cas enzyme at -20°C. It is recommended to aliquot according to the number of uses to avoid repeated temperature changes that may reduce enzyme activity.
<b>Purity</b>	95% (SDS-PAGE)
<b>Optimum temperature</b>	37°C
<b>Abbr</b>	LbuCas13a
<b>Applications</b>	RNA Detection; Diagnostics
<b>Appearance</b>	Liquid
<b>Molecular Weight</b>	140.6 kDa
<b>Species</b>	<i>Leptotrichia buccalis</i>
<b>Grade</b>	Research Grade
<b>reaction system</b>	1 µM LbuCas13a, 5 × Cleavage Buffer, 25 U RNase Inhibitor, 500 nM crRNA, 4 µM ssRNA Reporter, 1 µM RNA target, DEPC H2O