

Cas13a Nuclease from *Leptotrichia wadei*

Product Information

Cat#	CAS-1301
Source	Recombinant
Description	LwaCas13a (also known as C2c2) originates from the strain <i>Leptotrichia wadei</i> . LwaCas13a is a type II VI CRISPR system effector protein, a crRNA-mediated endonuclease. Its "auxiliary 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 labeled with fluorescent groups or other markers at both ends, CRISPR/Cas13a can be used to detect and amplify RNA templates. Results can be observed using a fluorometer or test strips.
Storage	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.
Purity	95% (SDS-PAGE)
Optimum temperature	37°C
Abbr	LwaCas13a
Applications	RNA Detection; Diagnostics
Appearance	Liquid
Molecular Weight	140.1 kDa
Species	<i>Leptotrichia wadei</i>
Grade	Research Grade
reaction system	1 µM LwaCas13a, 5 × Cleavage Buffer, 1 µM crRNA, 4 µM ssRNA Reporter, 25 U RNase Inhibitor, 1 µM RNA target, H2O