

## Recombinant N-Acetylneuraminic Acid Aldolase (NAL)

### Product Information

<b>Cat#</b>	BDE-052
<b>Description</b>	N-acetylneuraminic acid aldolase (NAL) converts N-acetylneuraminic acid to N-acetyl-D-mannosamine and pyruvate. Sialic acid (SA) is a key tumor marker, and enzymatic SA detection is rapid, sensitive, and automatable. NAL is a critical enzyme in SA assay kits, where pyruvate generation drives the detection reaction.
<b>Applications</b>	Used in sialic acid detection kits for the analysis of tumor and inflammation-related biomarkers.
<b>Enzyme Commission Number</b>	EC 4.1.3.3
<b>Form</b>	White lyophilized powder
<b>Source</b>	Recombinant protein expression
<b>Activity</b>	33 U/mg
<b>Unit Definition</b>	One unit is defined as the amount of enzyme required to catalyze the reaction of N-acetylneuraminic acid to produce 1 $\mu$ mol of pyruvate per minute under specified assay conditions (pH 7.7, 37 °C).
<b>Molecular Weight</b>	35 kDa (SDS-PAGE)
<b>Purity</b>	$\geq$ 90% by SDS-PAGE
<b>Storage Buffer</b>	100 mM phosphate buffer, pH 7.4
<b>Storage</b>	Store at 4°C for one year; store at -20°C for two years (it is recommended to store in aliquots to avoid repeated freeze-thaw cycles that may affect protein activity).