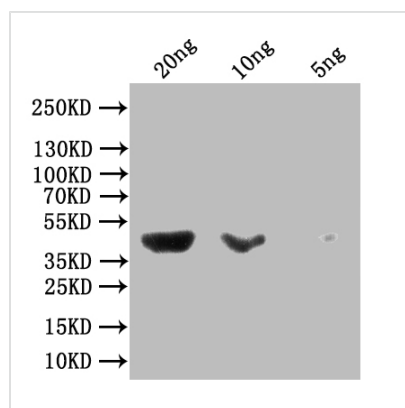




# malE Recombinant Monoclonal Antibody

<b>Product Code</b>	CSB-RA846828A0ENV
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	P0AEX9
<b>Immunogen</b>	A synthesized peptide derived from Escherichia coli malE
<b>Species Reactivity</b>	Escherichia coli
<b>Tested Applications</b>	ELISA, WB; Recommended dilution: WB:1:1000-1:5000
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
<b>Purification Method</b>	Affinity-chromatography
<b>Isotype</b>	Rabbit IgG
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Recombinant Antibody
<b>Immunogen Species</b>	Escherichia coli (strain K12)
<b>Research Area</b>	Tags & Cell Markers
<b>Gene Names</b>	malE
<b>Clone No.</b>	10F2

## Image



### Western Blot

Positive WB detected in Escherichia coli lysate

All lanes: malE antibody at 1: 1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 44 kDa

Observed band size: 44 kDa

## Description

The production of a recombinant monoclonal antibody against malE commenced with the immunization of a rabbit using a synthesized peptide derived from Escherichia coli malE. B cells were then isolated from the immunized rabbit, and RNA was extracted from these cells. The extracted RNA was reverse-transcribed into cDNA, serving as a template for extending malE antibody genes using degenerate primers. These engineered malE antibody genes were incorporated into a plasmid vector and introduced into host cells for



expression. The malE recombinant monoclonal antibody was subsequently isolated from the cell culture supernatant through affinity chromatography and subjected to ELISA and FC applications, displaying specific reactivity with *Escherichia coli* and human malE protein.

malE, also known as maltose-binding protein (MBP), is a protein found in bacteria, particularly in the *Escherichia coli* bacterium. Its main role is to function as a periplasmic protein that binds to and transports maltose and related sugar molecules into the bacterial cell.