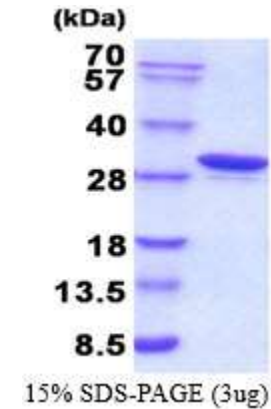


## *E. coli* Recombinant Carbonic anhydrase

<b>CATALOG NO:</b>	P1049-10      10 µg P1049-50      50 µg
<b>ALTERNATE NAMES:</b>	Carbonate dehydratase, CAN, yadF
<b>CONCENTRATION:</b>	1 mg/ml (determined by Bradford assay)
<b>SOURCE:</b>	<i>E.coli</i> expressed recombinant Carbonic anhydrase protein, fused to His-tag at N-terminus (1-220aa).
<b>PURITY:</b>	> 95% by SDS-PAGE
<b>MOL. WEIGHT:</b>	This protein is fused with 6x His tag at N terminus and the protein has a calculated MW of 27 kDa (240aa).
<b>FORM:</b>	Liquid
<b>FORMULATION:</b>	In 20 mM Tris-HCl buffer (pH8.0) containing 1mM DTT, 10% glycerol
<b>STORAGE CONDITIONS:</b>	Store at +4°C for short term (1-2 weeks). For long term storage, aliquot and store at -70°C. Avoid repeated freeze/thaw cycles.
<b>SEQUENCE:</b>	MGSSHHHHHH SSGLVPRGSH MKDIDTLISN NALWSKMLVE EDPGFFEKLA QAQKPRFLWI GCSDSRVPAE RLTGLEPGEL FVHRNVANLV IHTDLNCLSV VQYAVDVLEV EHHIICGHYG CGGVQAAVEN PELGLINNWL LHIRDIWFKH SLLGEMPQE RRLDTLCELN VMEQVYNLGH STIMQSAWKR GQKVTIHGWA YGIHDGLLRD LDVTATNRET LEQRYRHGIS NLKCLKHANHK
<b>DESCRIPTION:</b>	Carbonic anhydrase (CA) is an enzyme that catalyses rapid conversion of carbon dioxide to bicarbonate and protons ( $\text{CO}_2 + \text{H}_2\text{O} \leftrightarrow \text{HCO}_3^- + \text{H}^+$ ). Most carbonic anhydrases contain a zinc ion in their active site and the primary function of this enzyme is known to maintain acid-base balance in blood and other tissues, and to help transport carbon dioxide of tissues. Carbonic anhydrases have been found in all kingdoms of life. Recombinant carbonic anhydrase fused to His-tag, was expressed in <i>E.coli</i> and purified by conventional chromatography techniques.
<b>BIOLOGICAL ACTIVITY:</b>	Specific activity is >1,000 pmol/min/ug, and is defined as the amount of enzyme that hydrolyze 1.0 pmole of 4-nitrophenyl acetate to 4-nitrophenol per minute at pH 7.5 at 37C.



*E. coli* recombinant CA1

### RELATED PRODUCT:

- Human CellExp™ CA2, human recombinant (Cat. No. 7479-10, -50)
- Human CellExp™ CA4, human recombinant (Cat. No. 7484-10)
- Human CellExp™ CA9, human recombinant (Cat. No. 7478-10)
- Human CellExp™ CA10, human recombinant (Cat. No. 7485-10)
- Human Recombinant Carbonic anhydrase 2 (Cat. No. 6390-100)
- Carbonic Anhydrase 3 /CA3, human recombinant (Cat. No. 7833-10, -50)
- MMP-1, human recombinant (Cat. No. 7781-10, 50, 1000)
- MMP-2, human recombinant (Cat. No. 7782-10, 50, 1000)
- MMP-3, human recombinant (Cat. No. 7783-10, 50, 1000)
- MMP-9, human recombinant (Cat. No. 7789-10, 50, 1000)

**FOR RESEARCH USE ONLY! Not to be used on humans.**