

## Calcitonin gene-related peptide 1 Recombinant Protein | CALCA recombinant protein

Recombinant Human Calcitonin gene-related peptide 1

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|-------------------------------|-----------------------------------------------------------------|
| CATALOG #<br><b>AAA116214</b> | HOST<br><b>E Coli or Yeast or Baculovirus or Mammalian Cell</b> |
|-------------------------------|-----------------------------------------------------------------|

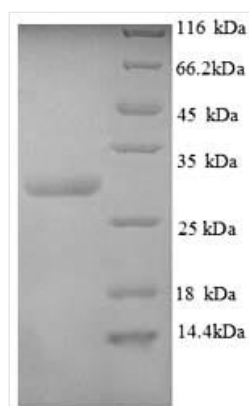
### PRODUCT SYNONYMS

Calcitonin gene-related peptide 1; Recombinant Human Calcitonin gene-related peptide 1; Alpha-type CGRP; Calcitonin gene-related peptide I; CGRP-I; CALCA recombinant protein

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| Host                    | E Coli or Yeast or Baculovirus or Mammalian Cell                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Purity/Purification     | Greater than 90% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Form/Format             | Liquid or Lyophilized powder<br>If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Sequence Positions      | 83-118aa; Partial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Sequence                | ACDTATCVTH RLAGLLSRSG GVVKNFVPT NVGSKA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Production Note         | <b>Special Offer:</b> The E Coli host-expressed protein is manufactured from a stock plasmid containing the protein gene. E Colihost-expressed protein is stocked in different unit sizes ranging from as small as 10 ug to as large as 1 mg. Bulk inventory is also available. The E Coli host-expressed protein has been ordered over and over again by researchers and has stood the test of time as both a robust protein and important target for the research community. It is part of our new program to make our most popular protein targets and corresponding hosts available in expanded unit sizes and with a quick processing time. Select E Coli host-expressed protein for the fastest delivery among all hosts. Please contact our <b>or email to</b> for more details. |
| Preparation and Storage | Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

### IMAGES



SDS-PAGE

### ADDITIONAL INFORMATION

|                                                                  |                                                                                                                                                                                                                                              |
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| <b>Related Product Information for CALCA recombinant protein</b> | CGRP induces vasodilation. It dilates a variety of vessels including the coronary, cerebral and systemic vasculature. Its abundance in the CNS also points toward a neurotransmitter or neuromodulator role. It also elevates platelet cAMP. |
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|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Categories/Family for CALCA recombinant protein | Signal Transduction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| References                                              | <p>Alternative RNA processing events in human calcitonin/calcitonin gene-related peptide gene expression.Jonas V., Lin C.R., Kawashima E., Semon D., Swanson L.W., Mermod J.-J., Evans R.M., Rosenfeld M.G.Proc. Natl. Acad. Sci. U.S.A. 82:1994-1998(1985) Structure and methylation of the human calcitonin/alpha-CGRP gene.Broad P.M., Symes A.J., Thakker R.V., Craig R.K.Nucleic Acids Res. 17:6999-7011(1989) Human chromosome 11 DNA sequence and analysis including novel gene identification.Taylor T.D., Noguchi H., Totoki Y., Toyoda A., Kuroki Y., Dewar K., Lloyd C., Itoh T., Takeda T., Kim D.-W., She X., Barlow K.F., Bloom T., Bruford E., Chang J.L., Cuomo C.A., Eichler E., FitzGerald M.G., Jaffe D.B., LaButti K., Nicol R., Park H.-S., Seaman C., Sougnez C., Yang X., Zimmer A.R., Zody M.C., Birren B.W., Nusbaum C., Fujiyama A., Hattori M., Rogers J., Lander E.S., Sakaki Y.Nature 440:497-500(2006) Structure and expression of a gene encoding human calcitonin and calcitonin gene related peptide.Nelkin B.D., Rosenfeld K.I., de Bustros A., Leong S.S., Roos B.A., Baylin S.B.Biochem. Biophys. Res. Commun. 123:648-655(1984) Expression of the human calcitonin/CGRP gene in lung and thyroid carcinoma.Edbrooke M.R., Parker D., McVey J.H., Riley J.H., Sorenson G.D., Pettengill O.S., Craig R.K.EMBO J. 4:715-724(1985) Calcitonin gene related peptide coding sequence is conserved in the human genome and is expressed in medullary thyroid carcinoma.Steenbergh P.H., Hoppener J.W., Zandberg J., de Ven W.J., Jansz H.S., Lips C.J.J. Clin. Endocrinol. Metab. 59:358-360(1984) Expression and function of the human calcitonin/alpha-CGRP gene in health and disease.Craig R.K., Riley J.H., Edbrooke M.R., Broad P.M., Foord S.M., Al-Kazwini S.J., Holman J.J., Marshall I.Biochem. Soc. Symp. 52:91-105(1986) Isolation and characterization of human calcitonin gene-related peptide.Morris H.R., Panico M., Etienne T., Tippins J., Girgis S.I., McIntyre I.Nature 308:746-748(1984) Identification in the human central nervous system, pituitary, and thyroid of a novel calcitonin gene-related peptide, and partial amino acid sequence in the spinal cord.Petermann J.B., Born W., Chang J.Y., Fischer J.A.J. Biol. Chem. 262:542-545(1987) Isolation and characterization of peptides which act on rat platelets, from a pheochromocytoma.Kitamura K., Kangawa K., Kawamoto M., Ichiki Y., Matsuo H., Eto T.Biochem. Biophys. Res. Commun. 185:134-141(1992) Solution structure of human calcitonin gene-related peptide by 1H NMR and distance geometry with restrained molecular dynamics.Breeze A.L., Harvey T.S., Bazzo R., Campbell I.D.Biochemistry 30:575-582(1991) Solution structures of calcitonin-gene-related-peptide analogues of calcitonin-gene-related peptide and amylin.Hubbard J.A.M., Martin S.R., Chaplin L.C., Bose C., Kelly S.M., Price N.C.Biochem. J. 275:785-788(1991)</p> |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                    |
|----------------------------------|--------------------------------------------------------------------|
| NCBI GI #                        | 76880478                                                           |
| NCBI GeneID                      | 796                                                                |
| NCBI Accession #                 | NP_001029125.1                                                     |
| NCBI GenBank Nucleotide #        | NM_001033953.2                                                     |
| UniProt Accession #              | P06881; Q93048; Q9UCP0; P01258                                     |
| Molecular Weight                 | 30.6 kDa                                                           |
| NCBI Official Full Name          | calcitonin gene-related peptide 1 isoform alpha-CGRP preproprotein |
| NCBI Official Synonym Full Names | calcitonin-related polypeptide alpha                               |
| NCBI Official Symbol             | CALCA                                                              |
| NCBI Official Synonym Symbols    | CT; KC; PCT; CGRP; CALC1; CGRP1; CGRP-I                            |
| NCBI Protein Information         | calcitonin; calcitonin gene-related peptide 1                      |
| UniProt Protein Name             | Calcitonin gene-related peptide 1                                  |
| UniProt Gene Name                | CALCA                                                              |
| UniProt Synonym Gene Names       | CALC1; CGRP-I                                                      |
| UniProt Entry Name               | CALCA_HUMAN                                                        |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

