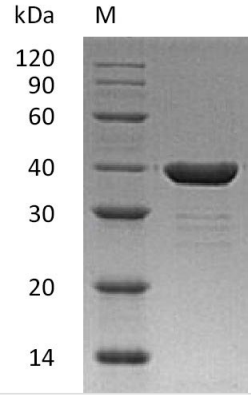
Recombinant Human Carbonic anhydrase-related protein (CA8), partial (Active)

Product Code	CSB-AP005421HU
Abbreviation	Recombinant Human CA8 protein, partial (Active)
Uniprot No.	P35219
Storage Buffer	0.2 μm Filtered 20 mM Tris-HCl, 500 mM NaCl, 1 mM DTT, pH 8.5
Product Type	Others
Immunogen Species	Homo sapiens (Human)
Biological Activity	The esterase activity is determined to be is 162.5 pmol/min/μg.
Purity	Greater than 95% as determined by SDS-PAGE.
Sequence	ADLSFIEDTVAFPEKEEDEEEEEEGVEWGYEEGVEWGLVFPDANGEYQSPINL NSREARYDPSLLDVRLSPNYVVCRDCEVTNDGHTIQVILKSKSVLSGGPLPQG HEFELYEVRFHWGRENQRGSEHTVNFKAFPMELHLIHWNSTLFGSIDEAVGK PHGIAIIALFVQIGKEHVGLKAVTEILQDIQYKGKSKTIPCFNPNTLLPDPLLRDY WVYEGSLTIPPCSEGVTWILFRYPLTISQLQIEEFRRLRTHVKGAELVEGCDGIL GDNFRPTQPLSDRVIRAAFQ
Research Area	Cancer
Source	E.coli
Target Names	CA8
Expression Region	2-290aa
Tag Info	C-terminal 6xHis-tagged
Mol. Weight	34.04 kDa
Protein Length	Partial

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Our Recombinant Human CA8 protein serves as a valuable research tool for scientists studying cancer biology. Carbonic anhydrase-related protein (CARP),

also known as CA8, is expressed in E. coli and features a partial expression region from 2-290aa. The protein is fused with a C-terminal 6xHis-tag for easy purification and identification. The lyophilized powder format allows for simple reconstitution with sterile water or buffer, accommodating various experimental requirements.

The Recombinant Human CA8 protein demonstrates high quality and performance, with a purity greater than 95%, as determined by SDS-PAGE analysis. Furthermore, endotoxin levels are maintained below 1.0 EU/μg, as assessed by the LAL method. The protein exhibits esterase activity greater than 100 pmol/min/ug, highlighting its functionality for relevant applications.

Human CA8 has been the focus of numerous research studies due to its implications in cancer biology. For instance, Ghandour *et al*. (2007)[1] and Maresca *et al*. (2013)[2] contributed to a better understanding of the function and potential clinical applications of CA8. These studies emphasize the role of CA8 in cellular processes and its potential therapeutic value in cancer treatment.

References:
1. Ghandour H, *et al*. Carbonic anhydrase-related protein (CARP VIII) in cancer. Subcell Biochem. 2014;75:217-34.
2. Maresca A, *et al*. Potential therapeutic agents for the treatment of carbonic anhydrase-related diseases. Expert Opin Ther Pat. 2013;23(7):883-95.

Endotoxin	Less than 1.0 EU/μg as determined by LAL method.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.