

## 32-6686: CA8 Human, Active

**Application :** Functional Assay

**Alternative Name :** Carbonic anhydrase-related protein, CA-VIII, CALS, CAMRQ3, CARP.

### Description

Source: Escherichia Coli.

Sterile Filtered clear solution.

Carbonic Anhydrase VIII or CA8 was previously called CA-related protein due to its sequence resemblance to additional recognized carbonic anhydrase genes. Nonetheless CA8 doesn't have carbonic anhydrase function. This protein keeps bearing a carbonic anhydrase classification because of coherent sequence similarity to additional proteins in carbonic anhydrase family. Mutations in this protein may lead to cerebellar dysequilibrium syndrome type 3 or ataxia mental retardation.

CA8 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 314 amino acids (1-290) and having a molecular mass of 35.5kDa. CA8 Humanis fused to a 24 amino acid His-Tag at N-terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** CA8 Human protein (1mg/ml) is formulated in 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol, 1mM DTT.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks.

**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MGSMDLSF IEDTVAFPEK EEEEEEEEG  
VEWGYEEGVWGLVFPDANG EYQSPINLNS REARYDPSLL DVRLSPNYVV CRDCEVTNDG  
HTIQVILKSKSVLSGGPLPQ GHEFELYEVF FHWGRENQRG SEHTVNFKAF PMELHLIHWN  
STLFGSIDEAVGKPHGIAII ALFVQIGKEH VGLKAVTEIL QDIQYKGKSK TIPCFNPNTL  
LPDPLLRDYWVYEGSLTIPP CSEGVTWILF RYPLTISQLQ IEEFRRLRTH VKGAELVEGC DGILGDNFRP  
TQPLSDRVIR AAFQ

### Application Note

Specific activity is > 450 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.