Recombinant Protein Technical Manual

Recombinant Human Carbonic Anhydrase 8/CA8 Protein (His Tag)(Active)

RPES4327

Product Data:

Product SKU: RPES4327

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: P35219

Protein Information:

Molecular Mass:	34.0 kDa
AP Molecular Mass:	40 kDa
Tag:	C-6His
Bio-activity:	Measured by its esterase activity The specific activity is 162.5 pmol/min/ug.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per µg as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 500mM NaCl, 1mM DTT, pH 8.5 .
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Carbonic Anhydrase-Related Protein; CARP; Carbonic Anhydrase VIII; CA-VIII; CA8; CALS;CAMRQ3;MGC120502;MGC99509

Immunogen Information:

Sequence: Ala2-Gln290

Background:

Carbonic Anhydrase 8 (CA8) belongs to the alpha-carbonic anhydrase family. Alpha-carbonic anhydrase is a large family of zinc metalloenzymes that catalyze the reversible hydration of carbon dioxide. Because CA8 has some sequence similarity with other known carbonic anhydrase genes, it was firstly called as CA-related protein. Nevertheless, CA8 does not have a carbonic anhydrase catalytic activity. Defects in CA8 are the cause of cerebellar ataxia mental retardation and dysequilibrium syndrome type 3 (CMARQ3), which is a congenital cerebellar ataxia associated with dysarthia, quadrupedal gait and mild mental retardation.