

## Recombinant Human Carbonic Anhydrase XII / CA12 Protein (His tag)

## Cat.NO.: TP06565

**3th Edition** 

## Synonyms:CA12;CAXII;FLJ20151;HsT18816

**Description**:Carbonic anhydrases (CAs) are a large family of zinc metalloenzymes first discovered in 1933 that catalyze the reversible hydration of carbon dioxide. CAs participate in a variety of biological processes, including respiration, calcification, acid-base balance, bone resorption, and the formation of aqueous humor, cerebrospinal fluid, saliva, and gastric acid. CA12, also known as Car12 and carbonic anhydrase XII, is a type I membrane enzyme of an N-terminal extracellular catalytic domain, a membrane-spanning α-helix, and a small intracellular C-terminal domain. It is highly expressed in colon, kidney, prostate, intestine and activated lymphocytes and moderately expressed in pancreas, ovary, and testis. Overexpression of the CA12 is observed in certain human cancers and is used as a tumor marker. rmCA12 corresponds to the extracellular domain and has both carbonic anhydrase activity and esterase activity.

Form:PBS

Molecular Weight: 31.6 kDa

Sequences:Met 1-Gln 291

Purity:> 95% by HPLC

**Concentration:** 

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.