# Data Sheet (Cat.No.TMAY-00857)

TargetMol

## Anti-CA13 Antibody (1D361)

### Product Details

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| Ig Type: | Rabbit IgG |
| Reactivity: | Human |
| Conjugation: | Unconjugated |
| Clone: | 1D361 |
| Purification: | Protein A |

### Applications

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| Application: | ELISA |
| Recommended | ELISA: 1:5000-1:10000 |

### Properties

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|---|---|
| Stability & Storage: | Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free. |
| Shipping: | Shipping with blue ice. |

### Antigen Details

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|---|---|
| Immunogen: | Recombinant Protein: Human Carbonic Anhydrase XIII / CA13 protein (TMPY-01734) |
| Antigen Species: | Human |
| Synonyms: | CAXIII;MGC59868;carbonic anhydrase XIII;FLJ37995 |

### Research Background

The carbonic anhydrases (or carbonate dehydratases) are classified as metalloenzyme for its zinc ion prosthetic group and form a family of enzymes that catalyze the rapid interconversion of carbon dioxide and water to bicarbonate and protons, a reversible reaction that takes part in maintaining acid-base balance in blood and other tissues. The carbonic anhydrasekl (CA) family consists of at least 11 enzymatically active members and a few inactive homologous proteins. The CAXIII is a member of the CA family, which owns a globular molecule with high structural similarity to cytosolic isozymes, CAI, II, and III. Recombinant mouse CAXIII showed catalytic activity similar to those of mitochondrial CAV and cytosolic CAI. In human tissues, CAXIII expression was identified in the thymus, small intestine, spleen, prostate, ovary, colon, and testis. In mouse, positive tissues included the spleen, lung, kidney, heart, brain, skeletal muscle, and testis. In conclusion, the predicted amino acid sequence, structural model, distribution, and activity data suggest that CAXIII represents a novel enzyme, which may play important physiological roles in several organs.



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