



Recombinant Protein Technical Manual

Recombinant Mouse Carboxylesterase 2E/CES2E Protein (His Tag) (Active)

RPES0783

Product Data:

Product SKU: RPES0783

Size: 10µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_766347.1

Protein Information:

Molecular Mass: 60.6 kDa

AP Molecular Mass: 52 kDa

Tag: C-His

Bio-activity: Measured by its ability to hydrolyze p-nitrophenylacetate. The specific activity is >50,000 pmoles/min/µg.

Purity: > 88 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 25mM Tris, 150mM NaCl, pH 7.5

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Pyrethroid hydrolase Ces2e; carboxylesterase 2E; Ces5;1700081L16Rik;1700122C07Rik;BB081581;cauxin;Ces7;Gm503

Immunogen Information:

Sequence: Met 1-His 556

Background:

Carboxylesterase belongs to the class of serine hydrolases family which includes Chymotrypsin and Acetylcholinesterase. Carboxylesterase is involved in the chemical reaction, exerting its role in catalyzing the carboxylic ester and water to convert to an alcohol and a carboxylate. Carboxylesterase is a type of enzyme that capable of hydrolyzing a variety of carboxylic acid esters and it's widely distributed in cells especially in mammalian liver. Carboxylesterase 5 (CES5), also known as cauxin or CES7, is one of CES enzyme families exerting role in catalyzing hydrolytic and transesterification reactions with broad substrat specificity. CES5 is reported in high concentrations in the urine of adult male cats, and within a protein complex of mammalian male epididymal fluids. Roles for carboxylesterase 5 may include regulating urinary levels of cat pheromone, catalyzing lipid transfer reactions within mammalian male reproductive fluids, and protecting neural tissue from drugs and xenobiotics.