

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

Catalog No. PKSM040582

Note: Centrifuge before opening to ensure complete recovery of vial contents.

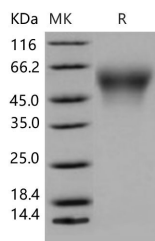
Description

Synonyms	Pyrethroid hydrolase Ces2e;carboxylesterase 2E;Ces5;1700081L16Rik;1700122C07Rik;BB081581;cauxin;Ces7;Gm503
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-His 556
Accession	NP_766347.1
Calculated Molecular Weight	60.6 kDa
Observed molecular weight	52 kDa
Tag	C-His
Bioactivity	Measured by its ability to hydrolyze pnitrophenylacetate. The specific activity is > 50, 000 pmoles/min/μg.

Properties

Purity	> 88 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 88 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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.