

## 32-6694: CES1 Human

**Alternative Name :** Liver carboxylesterase 1 isoform a, CES1, ACAT, CE-1, CEH, CES2, hCE-1, HMSE, HMSE1, PCE-1, REH, SES1, TGH, Acyl-coenzyme A:cholesterol acyltransferase, Brain carboxylesterase hBr1.

### Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

CES1 is a part of the alpha/beta fold hydrolase family and participates in the detoxification of xenobiotics and in the activation of ester and amide prodrugs. CES1 hydrolyzes aromatic and aliphatic esters, although it has no catalytic activity toward amides or a fatty acyl-CoA ester. CES1 hydrolyzes the methyl ester group of cocaine to form benzoylecgonine and catalyzes the transesterification of cocaine to form cocaethylene. CES1 also plays a role in detoxification in the lung and protection of the central nervous system from ester or amide compounds. CES1 is found in most tissues, mainly in the liver. CES1 Human produced in Sf9 Insect cells is a single, glycosylated polypeptide chain containing 559 amino acids (19-568 a.a.) and having a molecular mass of 61.7kDa (Molecular size on SDS-PAGE will appear at approximately 50-70kDa). CES1 is expressed with a 9 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** CES1 protein solution (0.5mg/ml) contains 25mM Sodium Acetate (pH 4.0), 10% glycerol, 0.1M NaCl and 0.1mM PMSF.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** ADLGHPSSPP VVDTVHGKVL GKFVSLEGFA QPVAIFLGIP FAKPPLGPLR FTTPQPAEPWSFVKNATSYP  
PMCTQDPKAG QLLSEFTNR KENIPLKLE DCLYLNIYTP ADLTKKNRPLPVMVWIHGGGL MVGAASTYDG  
LALAAHENVV VVTIQYRLGI WGGFSTGDEH SRGNWGHLDQVAALRWVQDN IASFGGNPGS VTIFGESAGG  
ESVSVLVLSLSP LAKNLFHRAI SESGVALTSVLVKKGDVKPL AEQIAITAGC KTTTSAVMVH CLRQKTEEEL  
LETTLKMKFL SLDLQGDPRESQPLLGTVID GMLLLKTPPEE LQAERNFHTV PYMVGINKQE FGWLIPQMLM  
SYPLSEGQLDQKTAMSLWK SYPLVCIKE LIPEATEKYL GGTDDTVKKK DLFLDLIADV  
MFGVPSVIVARNHRDAGAPT YMYEFQYRPS FSSDMKPKTV IGDHGDELFS VFGAPFLKEG  
ASEEEIRLSKMVMKFWANFA RNGNPNGEGL PHWPEYNQKE GYLQIGANTQ AAQKLDKEV  
AFWTNLFAKK AVEKPPQTEH IELHHHHHH.