

## 32-7404: Recombinant Human Carboxylesterase 1/CES1 (C-6His)(Discontinued)

**Gene :** CES1  
**Gene ID :** 1066  
**Uniprot ID :** P23141

### Description

Source: Human Cells.  
MW :61.05kD.

Recombinant Human Carboxylesterase 1 is produced by our Mammalian expression system and the target gene encoding His19-Glu562 is expressed with a 6His tag at the C-terminus. Carboxylesterase 1 (CES1) is a member of a large family of carboxylesterases that are responsible for the hydrolysis of ester and amide bonds. These enzymes have broad substrate specificity ranging from small molecule esters such as phenylester to long chain fatty acid esters and thioesters. They are major determinants of the pharmacokinetic behavior of most therapeutic agents containing an ester or amide bond. CES1 shares the serine hydrolase fold observed in other esterases. CES1 hydrolyzes aromatic and aliphatic esters, but has no catalytic activity toward amides or a fatty acyl-CoA ester. CES1 participates in detoxification of drugs such as cocaine and heroin in serum and liver. It may also play a role in detoxification in the lung and/or protection of the central nervous system from ester or amide compounds.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 20mM HAc-NaAc, 150mM NaCl, pH 4.0.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** HPSSPPVVDTVHGKVLGKFVSLEGFAQPVAIFLGIPFAKPLPLRFTPPQPAEPWSFVKNATSYPPMCTQDPKA  
GQLLELFTNRKENIPLKLESDCLYLNIIYTPADLTKKNRLPVMVWIHGGGLMVGAASTYDGLALAAHENVVVTI  
QYRLGIWGFSTGDEHSRGNWGHLDQVAALRWVQDNIA SFGGNPGSVTIFGESAGGESVSVLVSPLAKNLF  
HRAISEGVALTSVLVKKGDVKPLAEQIAITAGCKTTTSAVMVHCLRQKTEEELETTLKMFLSLDLQGDPPRES  
QPLLGTVIDGMLLLKTPEELQAERNFHTVPYMGINKQEFGWLIPMLMSYPLSEGQLDQKTAMSLWKSYPVC  
IAKELIPEATEKYLGGTDDTVKKKDLFLDLIADVDFVPSVIVARNHRDAGAPTYMYEFQYRPSFSSDMKPKTVI  
GDHGDELFSVFGAPFLKEGASEEEIRLSKMMKFWANFARNGNPNGEGLPHWPEYNQKEGYLQIGANTQAAQ  
KLDKEVAFWTNLFAKKAVEKPPQTEVDHHHHHHH

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.