

Rabbit Anti-BCHE/Cholinesterase Polyclonal: RC0046

Intended Use: For Research Use Only

Description: Butyrylcholine esterase (BCHE), designated acylcholine acylhydrolase or pseudocholinesterase, has esterase activity as well as aryl acylamidase activity. The encoded enzyme exhibits broad substrate specificity and is involved in the detoxification of poisons including organophosphate nerve agents and pesticides, and the metabolism of drugs including cocaine, heroin and aspirin. Humans homozygous for certain mutations in this gene exhibit prolonged apnea after administration of the muscle relaxant succinylcholine. Defects in the gene encoding BCHE are associated with the disease hypocholinesterasemia. Inhibition of BCHE effects the toxicity of organophosphates in the respiratory system suggesting that BCHE may play a role in respiratory function. In addition, BChE may play an important pharmacological role by hydrolyzing toxic esters. This suggests an involvement of BChE in a treatment for intoxication with substances such as cocaine.

Specifications

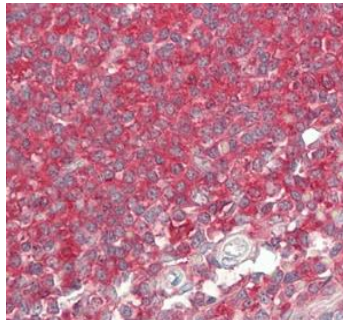
Clone: Polyclonal
Source: Rabbit
Isotype: IgG
Reactivity: Human
Immunogen: Recombinant human BCHE Glu29~Thr150 expressed in E.coli
Localization: Secreted
Formulation: Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC, ELISA, ICC, WB
Package:

| Description | Catalog No. | Size |
|---|-------------|------|
| BCHE/Cholinesterase Polyclonal Concentrated | RC0046 | 1 ml |

IHC Procedure*

Positive Control Tissue: Tonsil, spleen, pancreas
Concentrated Dilution: 10-50
Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
Incubation Time and Temp: Overnight @ 4°C
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human spleen stained with anti-BCHE using AEC

References:

1. Butyrylcholinesterase-Protein Interactions in Human Serum. Jacek Jasiecki, et al. Int J Mol Sci. Oct 1;22(19):10662, 2021.
2. Human butyrylcholinesterase efficacy against nerve agent exposure. Beth A Reed, et al. May;31(5), 2017.