Anti-Choline Acetyltransferase Antibody

Catalog#: 315-ChAT  Size: 100 µl

<table>
<thead>
<tr>
<th>Host</th>
<th>Applications</th>
<th>Species Tested</th>
<th>Species Reactivity*</th>
<th>Molecular Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goat</td>
<td>WB 1:100</td>
<td>A, Ch, GP, H, M, NHP, R</td>
<td>~70 kDa</td>
<td></td>
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<tr>
<td></td>
<td>IHC 1:100</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Product Description: Affinity purified goat polyclonal antibody

Biological Significance: Choline acetyltransferase is a neuronal enzyme which catalyzes the reaction between Acetyl CoA and choline resulting in the formation of acetylcholine. It is therefore found primarily in cholinergic neurons making it a valuable marker for diseases associated with decreased cholinergic function such as Schizophrenia, Alzheimer disease (AD) and Down syndrome (Holt et al. 1999). Decreased choline acetyltransferase activity in particular has been shown in Schizophrenic subjects (Karson et al 1993). It has furthermore been demonstrated that in patients with AD, there are significantly lower levels of cortical ChAT that correlate with severity of the disease as measured by loss of neuropsychological function (Baskin et al. 1999).

Antigen: Native choline acetyltransferase purified from human placenta.

Antibody Specificity: Specific for endogenous levels of the ~70 kDa choline acetyltransferase protein.

Purification Method: Prepared from goat serum by affinity purification using a column to which the protein immunogen was coupled.

Quality Control Tests: Western blots performed on each lot.

Packaging: 100 µl in PBS + 5 mg/ml BSA + 0.2% NaN3.

Storage and Stability: Shipped on blue ice. Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.

Application Key: WB = Western Blot  IF = Immunofluorescence  IHC = Immunohistochemistry  IP = Immunoprecipitation

Species Reactivity Key: All = All Species  A = Avian  Amp = Amphibian  Ar = Arabidopsis  B = Bovine  C = Canine  Ch = Chicken  D = Drosophila  GP = Guinea Pig  H = Human  Ha = Hamster  M = Mouse  NHP = Non-human primate  P = Pig  R = Rat  S = Sheep  X = Xenopus  Z = Zebrafish

*Species assumed based on 100% homology with sequence used as antigen

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General References:

