

Rabbit antibody to ChAT (167-188): whole serum

Catalogue No.:	R-043-100
Description:	This gene encodes an enzyme which catalyzes the biosynthesis of the neurotransmitter acetylcholine. This gene product is a characteristic feature of cholinergic neurons, and changes in these neurons may explain some of the symptoms of Alzheimer's disease. Polymorphisms in this gene have been associated with Alzheimer's disease and mild cognitive impairment. Mutations in this gene are associated with congenital myasthenic syndrome associated with episodic apnea. Multiple transcript variants encoding different isoforms have been found for this gene, and some of these variants have been shown to encode more than one isoform. [provided by RefSeq, May 2010]
Related products:	PE-1762-100, ChAT control peptide (167-188)
Batch No.:	See product label
Unit size:	100 uL
Antigen:	A synthetic peptide (GLFSSYRLPGHTQDTLVAQKSS) as a part of porcine ChAT protein (aa: 167-188) conjugated to KLH
Other Names:	Choline O-acetyltransferase; CHOACTase; Choline acetylase
Accession:	CLAT_PIG
Produced in:	Rabbit
Purity:	Whole serum
Applications:	Immunohistochemistry/cytochemistry on 4% PFA or formalin fixed frozen sections; paraffin sections can be more difficult and require more extensive antigen recovery methods. 1:400-1:2000 depending up detection and incubation timesELISA: direct antigen ELISAThis antiserum will superbly stain both cell bodies and nerve terminal, and works particularly well in enteric and peripheral neurons. Biosensis recommends optimal dilutions/concentrations should be determined by the end user.
Specificity:	This antiserum stains cholinergic neurons in guinea-pig and rabbit.
Cross-reactivity:	This antiserum is known to react with ChAT of origin guinea-pig, mouse, rat and rabbit.
Form:	Lyophilised
Reconstitution:	Reconstitute in 100 uL of sterile water. Centrifuge to remove any insoluble material.
Storage:	Store lyophilized antibody at 2-8C. After reconstitution keep aliquots at -20C for a higher stability, and at 2-8C with an appropriate antibacterial agent. Glycerol (1:1) may be added for an additional stability. Avoid repetitive freeze/thaw cycles.
Specific References:	Beig MI, Dampney BW and Carrive P (2014) Both ox1r and ox2r orexin receptors contribute to the cardiovascular and locomotor components of the novelty stress response in the rat. <i>Neuropharmacology</i> September 16 [Epub ahead of print] Application: IH; Species: Rat Ellis KM, O'Carroll DC, Lewis MD, Rychkov GY, Koblar SA (2014) Neurogenic potential of dental pulp stem cells isolated from murine incisors. <i>Stem Cell Res Ther.</i> 2014 Feb 27;5(1):30.

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Application: IF; Species: Mouse

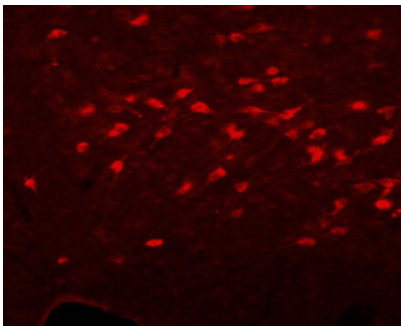
Leong WK, Klaric TS, Lin Y, Lewis MD, Koblar SA (2013) Upregulation of the neuronal Per-Arnt-Sim domain protein 4 (Npas4) in the rat corticolimbic system following focal cerebral ischemia. *Eur J Neurosci.* 2013 Jun;37(11):1875-84

Application: IH; Species: Rat

Li S et al (2011) The expression and localization of Prune2 mRNA in the central nervous system.

Neurosci Lett. Oct 10;503(3):208-14.

General References: Benecke et al. (1993). *J. Neurochemistry.* 61: 804-811



Immunofluorescent staining of rat basal forebrain cholinergic neurons using rabbit anti-ChAT primary and Cy3 secondary antibodies.

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