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Presynaptic nicotinic cholinoreceptors modulate velocity of the action potential propagation along the motor nerve endings at a high-frequency synaptic activity

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Abstract

© 2016, Pleiades Publishing, Ltd. Experiments on frog neuromuscular junctions have demonstrated that asynchrony of the acetylcholine quantal release forming the multi-quantal evoked response at high-frequency synaptic activity is caused, in particular, by a decrease in velocity of the action potential propagation along the non-myelinated nerve endings, which is mediated by activation of the $\alpha 7$ and $\alpha 4\beta 4$ nicotinic cholinoreceptors.

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