

## CHRNA7 RABBIT PAB

**Cat.#:** S222456

**Product Name:** Anti-CHRNA7 Rabbit Polyclonal Antibody

**Synonyms:** NACHRA7; CHRNA7-2

**UNIPROT ID:** P36544 (Gene Accession - NP\_001177384 )

**Background:** The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are thought to be hetero-pentamers composed of homologous subunits. The proposed structure for each subunit is a conserved N-terminal extracellular domain followed by three conserved transmembrane domains, a variable cytoplasmic loop, a fourth conserved transmembrane domain, and a short C-terminal extracellular region. The protein encoded by this gene forms a homo-oligomeric channel, displays marked permeability to calcium ions and is a major component of brain nicotinic receptors that are blocked by, and highly sensitive to, alpha-bungarotoxin. Once this receptor binds acetylcholine, it undergoes an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane. This gene is located in a region identified as a major susceptibility locus for juvenile myoclonic epilepsy and a chromosomal location involved in the genetic transmission of schizophrenia. An evolutionarily recent partial duplication event in this region results in a hybrid containing sequence from this gene and a novel FAM7A gene. Alternative splicing results in multiple transcript variants.

**Immunogen:** Synthetic peptide of human CHRNA7

**Applications:** ELISA, IHC

**Recommended Dilutions:** IHC: 50-200; ELISA: 5000-10000

**Host Species:** Rabbit

**Clonality:** Rabbit Polyclonal

**Isotype:** Immunogen-specific rabbit IgG

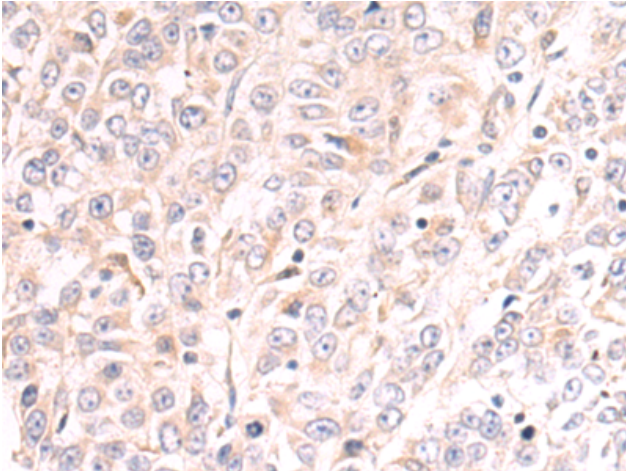
**Purification:** Antigen affinity purification

**Species Reactivity:** Human, Mouse, Rat

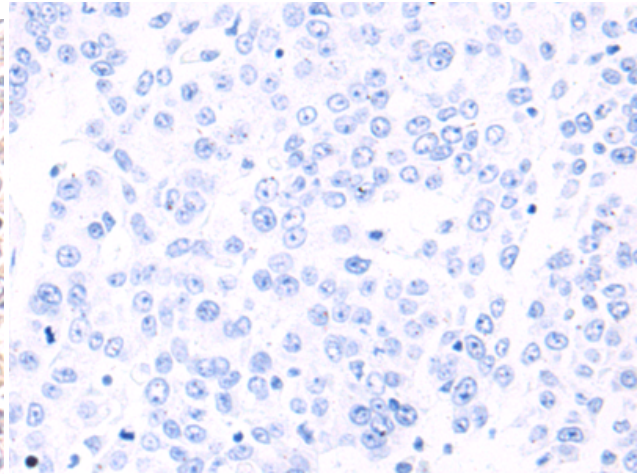
**Constituents:** PBS (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150 mM NaCl, 0.05% Sodium Azide and 40% glycerol

**Research Areas:** Neuroscience, Cancer, Metabolism

**Storage & Shipping:** Store at -20°C. Avoid repeated freezing and thawing



Immunohistochemistry analysis of paraffin embedded Human liver cancer tissue using 222456(CHRNA7 Antibody) at a dilution of 1/50(Cytoplasm).



In comparison with the IHC on the left, the same paraffin-embedded Human liver cancer tissue is first treated with the synthetic peptide and then with 222456(Anti-CHRNA7 Antibody) at dilution 1/50.