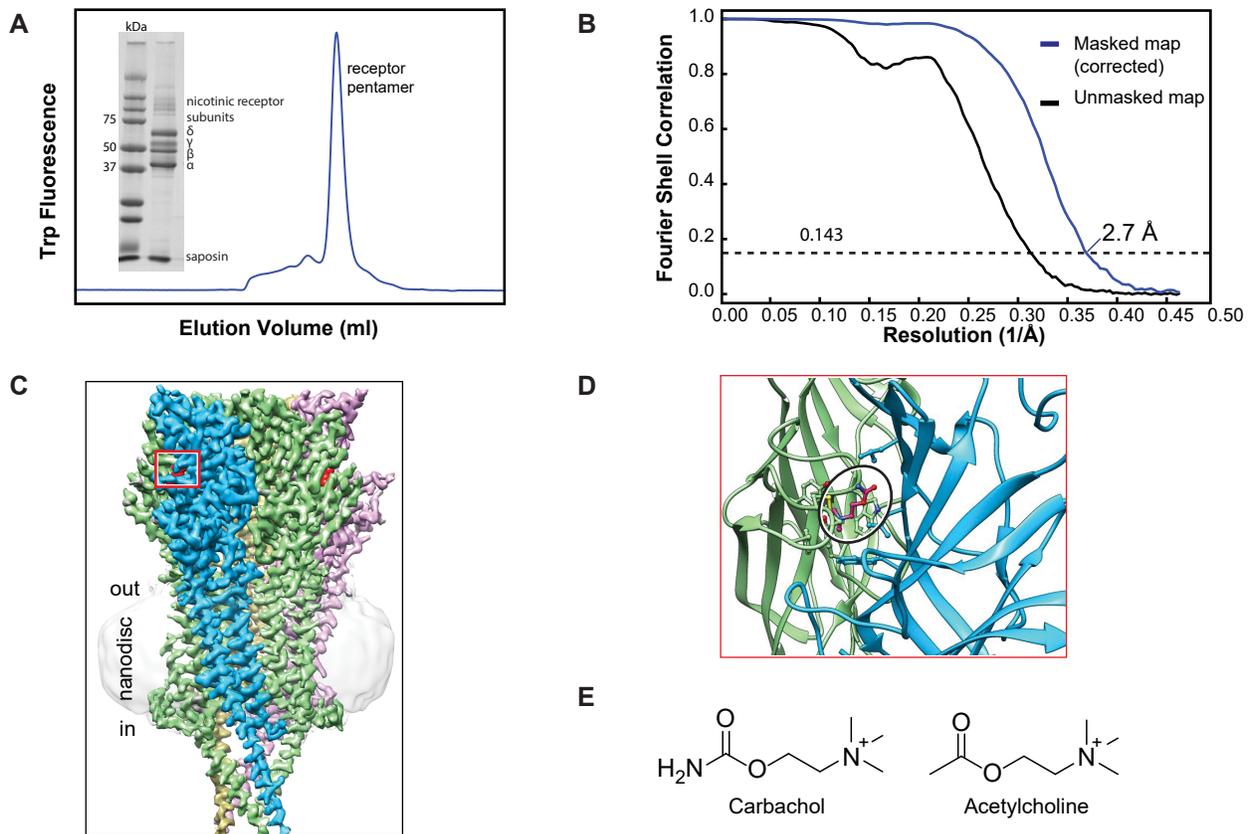


**Fig. 1. Recently obtained high-resolution structure of  $\alpha_1\beta_2\gamma_2$  GABA<sub>A</sub> receptor in complex with GABA and its positive allosteric agonist PPTQ. A, Size exclusion chromatography trace and SDS-PAGE gel showing the protein after final purification. B, Local resolution map for Cryo-EM reconstruction. C, Fourier Shell Correlation plot showing final resolution of 2.6 Å. D, Ligands to be used for the proposed Chameleon experiment.**



**Fig. 2. Recently obtained high-resolution structure of Torpedo nicotinic receptor in complex with carbachol. A, Size exclusion chromatography trace and SDS-PAGE gel showing the protein after final purification. B, Fourier Shell Correlation plot showing final resolution of 2.7 Å. C, 3D Cryo-EM reconstruction highlighting the neurotransmitter binding pocket. D, A close up view of the neurotransmitter binding pocket with carbachol bound at  $\alpha/\gamma$  interface. E, Ligand to be used for the proposed Chameleon experiment.**