

**bs-11987R****[ Primary Antibody ]****CAPON Rabbit pAb**

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**— DATASHEET —**

<b>Host:</b> Rabbit	<b>Isotype:</b> IgG	<b>Applications:</b> <b>WB</b> (1:500-2000) <b>IHC-P</b> (1:100-500) <b>IHC-F</b> (1:100-500) <b>IF</b> (1:100-500) <b>ICC/IF</b> (1:100-500) <b>ELISA</b> (1:5000-10000)  <b>Reactivity:</b> (predicted: Human, Mouse, Rat, Sheep, Cow, Horse)  <b>Predicted MW.:</b> 56 kDa  <b>Subcellular Location:</b> Cell membrane ,Cytoplasm ,Nucleus
<b>Clonality:</b> Polyclonal		
<b>GeneID:</b> 9722	<b>SWISS:</b> O75052	
<b>Target:</b> CAPON		
<b>Immunogen:</b> KLH conjugated synthetic peptide derived from human CAPON: 128-170/506.		
<b>Purification:</b> affinity purified by Protein A		
<b>Concentration:</b> 1mg/ml		
<b>Storage:</b> 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.		
<b>Background:</b> CAPON (carboxy-terminal PDZ ligand of nNOS) selectively binds within the 100 amino acid PDZ domain of the neuronal nitric oxide synthase (nNOS), but not to endothelial NOS or inducible NOS, and sequesters nNOS in the cytosol. Biosynthesis of the neurotransmitter nitric oxide (NO) requires the association of nNOS with various synaptic proteins, including syntrophin, postsynaptic density (PSD)95 and PSD93 through a scaffolding PDZ domain. These proteins facilitate the transport of nNOS to the plasma membrane, where it is catalytically activated by NMDA-receptor mediated calcium channels. The association of nNOS with PSD95 or PSD93 is regulated by CAPON. The carboxy terminus of CAPON binds to the PDZ domain, competes with PSD95 and PSD93 for binding to nNOS and in turn prevents the translocation and catalytic activation of nNOS.		