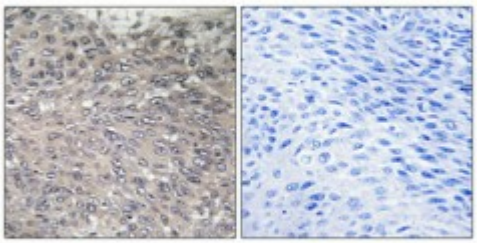
Anti-Phospho-IP3R-I (S1598) antibody



Description	Rabbit polyclonal to Phospho-IP3R-I (S1598).

Model	STJ91314
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC
Immunogen	Synthesized peptide derived from human IP3R-I around the phosphorylation site of S1598.
Immunogen Region	1540-1620 aa
Gene ID	3708
Gene Symbol	ITPR1
Dilution range	IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	Phospho-IP3R-I (S1598) Polyclonal Antibody detects endogenous levels of IP3R-I protein only when phosphorylated at S1598.
Tissue Specificity	Widely expressed.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Inositol 1,4,5-trisphosphate receptor type 1 IP3 receptor isoform 1 IP3R 1 InsP3R1 Type 1 inositol 1,4,5-trisphosphate receptor Type 1 InsP3 receptor
Molecular Weight	313.945 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:6180OMIM:117360
Alternative Names	Inositol 1,4,5-trisphosphate receptor type 1 IP3 receptor isoform 1 IP3R 1 InsP3R1 Type 1 inositol 1,4,5-trisphosphate receptor Type 1 InsP3 receptor
Function	Intracellular channel that mediates calcium release from the endoplasmic reticulum following stimulation by inositol 1,4,5-trisphosphate . Involved in the regulation of epithelial secretion of electrolytes and fluid through the interaction with AHCYL1 . Plays a role in ER stress-induced apoptosis. Cytoplasmic calcium released from the ER triggers apoptosis by the activation of CaM kinase II, eventually leading to the activation of downstream apoptosis pathways .
Sequence and Domain Family	The receptor contains a calcium channel in its C-terminal extremity. Its large N-terminal cytoplasmic region has the ligand-binding site in the N-terminus and modulatory sites in the middle portion immediately upstream of the channel region.
Cellular Localization	Endoplasmic reticulum membrane Cytoplasmic vesicle, secretory vesicle membrane Cytoplasm, perinuclear region. Endoplasmic reticulum and secretory granules .
Post-translational Modifications	Phosphorylated on tyrosine residues. Ubiquitination at multiple lysines targets ITPR1 for proteasomal degradation. Approximately 40% of the ITPR1-associated ubiquitin is monoubiquitin, and polyubiquitins are both 'Lys-48'- and 'Lys-63'-linked . Phosphorylated by cAMP kinase (PKA). Phosphorylation prevents the ligand-induced opening of the calcium channels. Phosphorylation by PKA increases the interaction with inositol 1,4,5-trisphosphate and decreases the interaction with AHCYL1.