Callmodulin stimulated

Technology, Development



PDE1 Ca2+/Callmodulin Stimulated/ cAMP, cGMP Cytoplasm, plasma membrane and lysosome Heart, brain, lungs and smooth muscle cells Neuronal Signaling and sperm function PDE2 cAMP, cGMP Plasma membrane Adrenal gland, heart, lung, liver, platelets Adrenal gland function and memory PDE3 cAMP, cGMP Plasma membrane Heart, lung, liver, platelets and adipose tissue Oocyte maturation and platelet aggregation. PDE4 cAMP Plasma membrane, cytoplasm, nucleus, mitochondria and golgi Sertoli cells, kidney, brain, liver, lung and inflammatory cells Brain function, macrophages activation and fertility PDE5 cGMP Plasma membrane, ER and cytoplasm Lung, platelets and vascular smooth muscle Vascular smooth muscle contraction in penis and lungs PDE6 cGMP Golgi apparatus and centrosome Photoreceptors of rods and cones Photoresponse signalling in the eye PDE7 cAMP Golgi apparatus and centrosome Kidney, brain, pancreas and T lymphocytes Activation of inflammatory cells PDE8 cAMP Mitochondria and cytoplasm Testes, eye, liver, brain and T lymphocytes Leydig cell function PDE9 cGMP Cytoplasm and plasma membrane Kidney, liver, lung and brain NO and cGMP signaling in the brain PDE10 cGMP, cAMP Plasma membrane and cytoplasm Testes and brain Learning and memory PDE11 cGMP Plasma membrane, nucleus and cytoplasm Skeletal muscle, prostate and testes Sperm development and function