ARG10803
anti-PDE4D antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes PDE4D
Tested Reactivity	Hu, Ms, Rat
Tested Application	Confocal, Dot, ELISA, ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	PDE4D
Species	Human
Immunogen	Synthetic cyclic peptide around the C-terminus of PDE4D protein.
Conjugation	Un-conjugated
Alternate Names	EC 3.1.4.53; STRK1; DPDE3; PDE43; ACRDYS2; PDE4DN2; cAMP-specific 3',5'-cyclic phosphodiesterase 4D; HSPDE4D

Application Instructions

Application table

Application	Dilution
Confocal	1:200
Dot	1:10000
ELISA	1:10000
ICC/IF	Assay-dependent
IHC-P	1:50
IP	1:150
WB	1:500

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

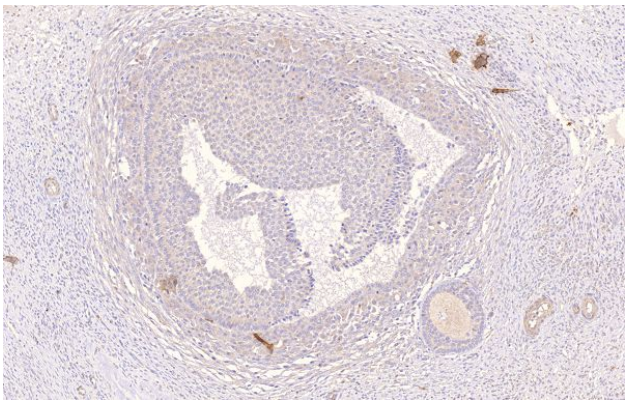
Form	Liquid
Purification	Affinity purified.
Buffer	Tris-Glycine Buffer (pH 7.4 - 7.8), Hepes, 0.02% Sodium azide, 30% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	30% Glycerol and 0.5% BSA

Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

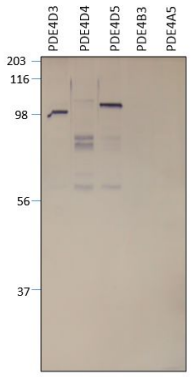
Gene Symbol	PDE4D
Gene Full Name	phosphodiesterase 4D, cAMP-specific
Background	This gene encodes one of four mammalian counterparts to the fruit fly 'dunce' gene. The encoded protein has 3',5'-cyclic-AMP phosphodiesterase activity and degrades cAMP, which acts as a signal transduction molecule in multiple cell types. This gene uses different promoters to generate multiple alternatively spliced transcript variants that encode functional proteins.[provided by RefSeq, Sep 2009]
Function	Hydrolyzes the second messenger cAMP, which is a key regulator of many important physiological processes. [UniProt]
Calculated Mw	91 kDa
PTM	Long isoforms that share a conserved PKA phosphorylation site in the N-terminus are activated by PKA through phosphorylation (By similarity). Isoform 3 and isoform 7 are activated by phosphorylation (in vitro), but not isoform 6. Isoform N3 and isoform 12 are phosphorylated on Ser-49, Ser-51, Ser-55 and Ser-59. Sumoylation of long isoforms by PIAS4 augments their activation by PKA phosphorylation and represses their inhibition by ERK phosphorylation.

Images



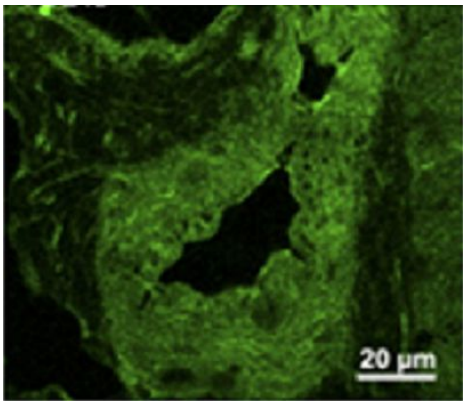
ARG10803 anti-PDE4D antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human ovarian medulla tissue stained with ARG10803 anti-PDE4D antibody at 1:50 dilution.



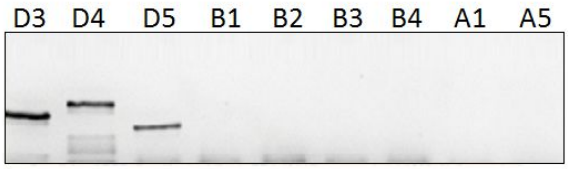
ARG10803 anti-PDE4D antibody WB image

Western blot: Recombinant PDE4 protein variants stained with ARG10803 anti-PDE4D antibody at 1:500 dilution.



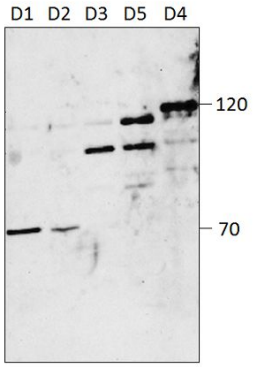
ARG10803 anti-PDE4D antibody Confocal image

Confocal laser microscopy: Abdominal skeletal muscle stained with ARG10803 anti-PDE4D antibody at 1:200 dilution.



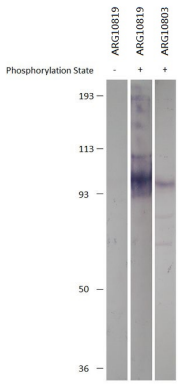
ARG10803 anti-PDE4D antibody WB image

Western blot: PDE4D, PDE4B and PDE4A variants stained with ARG10803 anti-PDE4D antibody at 1:1000 dilution.



ARG10803 anti-PDE4D antibody WB image

Western blot: Recombinant PDE4D variants (PDE4D1, PDE4D2, PDE4D3, PDE4D5, and PDE4D4) stained with ARG10803 anti-PDE4D antibody at 1:500 dilution. Apparent MW for D1 - D5 are 68, 70, 95, 119, and 105 kDa respectively.



ARG10803 anti-PDE4D antibody WB image

Western blot: non-phosphorylated and phosphorylated PDE4D protein stained with ARG10819 anti-PDE4D phospho (Ser190) antibody and ARG10803 anti-PDE4D antibody at 1:500 dilution.