

## ARG10812 anti-PDE9A antibody

Package: 50 μg Store at: -20°C

# Summary

| Product Description | Rabbit Polyclonal antibody recognizes PDE9A  |
|---------------------|--|
| Tested Reactivity   | Hu, Ms, Rat  |
| Tested Application  | Confocal, Dot, ELISA, ICC/IF, IHC-P, IP, WB  |
| Host                | Rabbit   |
| Clonality           | Polyclonal   |
| Isotype             | lgG  |
| Target Name         | PDE9A  |
| Species             | Human  |
| Immunogen           | Synthetic cyclic peptide common to all PDE9A variants.                               |
| Conjugation         | Un-conjugated  |
| Alternate Names     | High affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A; EC 3.1.4.35; HSPDE9A2 |

## **Application Instructions**

| Application table | Application  | Dilution   |
|-------------------|--|--|
|                   | Confocal   | 1:100  |
|                   | Dot  | 1:100  |
|                   | ELISA  | 1:100  |
|                   | ICC/IF   | 1:100  |
|                   | IHC-P  | 1:100  |
|                   | IP   | 1:250  |
|                   | WB   | 1:500  |
| Application Note  | * The dilutions indicate recomme<br>should be determined by the scie | ended starting dilutions and the optimal dilutions or concentrations entist. |

# 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<br>and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw<br>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<br>Gene Full Name<br>Background | PDE9A<br>phosphodiesterase 9A<br>The protein encoded by this gene catalyzes the hydrolysis of cAMP and cGMP to their corresponding<br>monophosphates. The encoded protein plays a role in signal transduction by regulating the intracellular<br>concentration of these cyclic nucleotides. Multiple transcript variants encoding several different isoforms<br>have been found for this gene. [provided by RefSeq, Jul 2008]  |
| Function                                    | Specifically hydrolyzes the second messenger cGMP, which is a key regulator of many important physiological processes. Highly specific: compared to other members of the cyclic nucleotide phosphodiesterase family, has the highest affinity and selectivity for cGMP. Specifically regulates natriuretic-peptide-dependent cGMP signaling in heart, acting as a regulator of cardiac hypertrophy in myocytes and muscle. Does not regulate nitric oxide-dependent cGMP in heart. Additional experiments are required to confirm whether its ability to hydrolyze natriuretic-peptide-dependent cGMP is specific to heart or is a general feature of the protein (Probable). In brain, involved in cognitive function, such as learning and long-term memory (By similarity). [UniProt] |
| Calculated Mw                               | 68 kDa   |

## Images



#### ARG10812 anti-PDE9A antibody WB image

Western blot: Recombinant PDE9A protein stained with ARG10812 anti-PDE9A antibody at 1:500 dilution.



#### ARG10812 anti-PDE9A antibody WB image

Western blot: PDE9A on SDS-PAGE showing tissue distribution of PDE9A. The blots were stained with ARG10812 anti-PDE9A antibody at 1:1000 dilution.