

# ARG58212 anti-AMD1 antibody

Package: 50 μg Store at: -20°C

# Summary

| Product Description | Rabbit Polyclonal antibody recognizes AMD1  |
|---------------------|---|
| Tested Reactivity   | Hu, Ms, Rat   |
| Tested Application  | IHC-P   |
| Host                | Rabbit  |
| Clonality           | Polyclonal  |
| lsotype             | lgG   |
| Target Name         | AMD1  |
| Species             | Human   |
| Immunogen           | Synthetic peptide corresponding to a sequence of Human AMD1 (RKNFMKPSHQGYPHRNFQEEIEFLNA). |
| Conjugation         | Un-conjugated   |
| Alternate Names     | EC 4.1.1.50; SAMDC; ADOMETDC; AMD; S-adenosylmethionine decarboxylase proenzyme; AdoMetDC |

# **Application Instructions**

| Application table | Application   | Dilution      |
|-------------------|---|---------------|
|                   | IHC-P   | 0.5 - 1 μg/ml |
| Application Note  | IHC-P: Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0) for 20 min.<br>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations<br>should be determined by the scientist. |               |

# Properties

| Form                | Liquid   |
|---------------------|--|
| Purification        | Affinity purification with immunogen.  |
| Buffer              | 0.9% NaCl, 0.2% Na2HPO4, 0.05% Sodium azide and 5% BSA.  |
| Preservative        | 0.05% Sodium azide   |
| Stabilizer          | 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 or below. 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    | AMD1   |
|----------------|--|
| Gene Full Name | adenosylmethionine decarboxylase 1   |
| Background     | This gene encodes an important intermediate enzyme in polyamine biosynthesis. The polyamines spermine, spermidine, and putrescine are low-molecular-weight aliphatic amines essential for cellular proliferation and tumor promotion. Multiple alternatively spliced transcript variants have been identified. Pseudogenes of this gene are found on chromosomes 5, 6, 10, X and Y. [provided by RefSeq, Dec 2013]   |
| Function       | Essential for biosynthesis of the polyamines spermidine and spermine. Promotes maintenance and self-renewal of embryonic stem cells, by maintaining spermine levels (By similarity). [UniProt]   |
| Calculated Mw  | 38 kDa   |
| PTM            | Is synthesized initially as an inactive proenzyme. Formation of the active enzyme involves a self-<br>maturation process in which the active site pyruvoyl group is generated from an internal serine residue<br>via an autocatalytic post-translational modification. Two non-identical subunits are generated from the<br>proenzyme in this reaction, and the pyruvate is formed at the N-terminus of the alpha chain, which is<br>derived from the carboxyl end of the proenzyme. The post-translation cleavage follows an unusual<br>pathway, termed non-hydrolytic serinolysis, in which the side chain hydroxyl group of the serine<br>supplies its oxygen atom to form the C-terminus of the beta chain, while the remainder of the serine<br>residue undergoes an oxidative deamination to produce ammonia and the pyruvoyl group blocking the<br>N-terminus of the alpha chain. [UniProt] |

### Images



#### ARG58212 anti-AMD1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58212 anti-AMD1 antibody at 1  $\mu$ g/ml dilution, overnight at 4°C.



#### ARG58212 anti-AMD1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58212 anti-AMD1 antibody at 1  $\mu$ g/ml dilution, overnight at 4°C.





### ARG58212 anti-AMD1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse kidney tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58212 anti-AMD1 antibody at 1  $\mu$ g/ml dilution, overnight at 4°C.

#### ARG58212 anti-AMD1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney tissue. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58212 anti-AMD1 antibody at 1  $\mu$ g/ml dilution, overnight at 4°C.



#### ARG58212 anti-AMD1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer. Antigen Retrieval: Heat mediated was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG58212 anti-AMD1 antibody at 1  $\mu$ g/ml dilution, overnight at 4°C.