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# VAX1 Rabbit pAb

Catalog # AP99892

## Product Information

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| **Application** | WB |
| **Primary Accession** | Q5SQQ9 |
| **Other Accession** | Q5SQQ9 |
| **Reactivity** | Rat, Human, Mouse |
| **Predicted** | Pig, Chicken, Dog |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 34713 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human VAX1 |
| **Epitope Specificity** | 133-200/334 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the EMX homeobox family. Contains 1 homeobox DNA-binding domain. |
| **DISEASE** | Defects in VAX1 are the cause of microphthalmia, syndromic, type 11 (MCOPS11) [MIM:614402]. A rare clinical entity including as main characteristics microphthalmia and small optic nerves, cleft lip and palate, absence of corpus callosum, hippocampal malformations, and absence of the pineal gland. Microphthalmia is a disorder of eye formation, ranging from small size of a single eye to complete bilateral absence of ocular tissues (anophthalmia). In many cases, microphthalmia/anophthalmia occurs in association with syndromes that include non-ocular abnormalities. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | The homeobox DNA-binding domain is a 60 amino acid motif that is conserved among many species and functions to bind DNA via a helix-turn-helix structure, thereby playing a role in transcriptional regulation and the control of gene expression. VAX1 (ventral anterior homeobox 1) is a 334 amino acid protein that localizes to the nucleus and contains one homeobox DNA-binding domain. Expressed as multiple alternatively spliced isoforms, VAX1 is required for major tract formation and axon guidance in the developing brain and may play a role in the differentiation of various structures, including the optic stalk, the neuroretina and the pigmented epithelium. The gene encoding VAX1 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. |

## Additional Information

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| **Gene ID** | 11023 |
| **Other Names** | MCOPS11; VAX1_HUMAN; VAX1; VAX1_MOUSE; VAX1_RAT; ventral anterior |

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| | homeobox 1 |
| **Dilution** | WB=1:500-2000,ICC/IF=1:100-500,Flow-Cyt=1 □g/Test |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **Name** | VAX1 |
| **Function** | Transcription factor that may function in dorsoventral specification of the forebrain. Required for axon guidance and major tract formation in the developing forebrain. May contribute to the differentiation of the neuroretina, pigmented epithelium and optic stalk (By similarity). |
| **Cellular Location** | Nucleus {ECO:0000255\|PROSITE-ProRule:PRU00108}. |

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.