

# Neural retinal specific leucine zipper/NRL Rabbit pAb

Catalog # AP98229

## Product Information

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| <b>Application</b>             | WB, IHC-P, IHC-F, IF                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Primary Accession</b>       | <a href="#">P54845</a>                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Other Accession</b>         | <a href="#">P54845</a>                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Host</b>                    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Clonality</b>               | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Calculated MW</b>           | 25940                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Physical State</b>          | Liquid                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Immunogen</b>               | KLH conjugated synthetic peptide derived from human Neural retinal specific leucine zipper/NRL                                                                                                                                                                                                                                                                                              |
| <b>Epitope Specificity</b>     | 151-237/237                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Isotype</b>                 | IgG                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Purity</b>                  | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                              |
| <b>Buffer</b>                  | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                           |
| <b>SIMILARITY</b>              | Belongs to the bZIP family. Contains 1 bZIP domain.                                                                                                                                                                                                                                                                                                                                         |
| <b>DISEASE</b>                 | Defects in NRL are the cause of retinitis pigmentosa type 27 (RP27) [MIM:162080]. RP leads to degeneration of retinal photoreceptor cells. Patients typically have night vision blindness and loss of midperipheral visual field. As their condition progresses, they lose their far peripheral visual field and eventually central vision as well. RP27 inheritance is autosomal dominant. |
| <b>Important Note</b>          | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                                                                                                   |
| <b>Background Descriptions</b> | This gene encodes a basic motif-leucine zipper transcription factor of the Maf subfamily. The encoded protein is conserved among vertebrates and is a critical intrinsic regulator of photoceptor development and function. Mutations in this gene have been associated with retinitis pigmentosa and retinal degenerative diseases. [provided by RefSeq, Jul 2008]                         |

## Additional Information

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| <b>Gene ID</b>     | 4901                                                                                                                                                                                            |
| <b>Other Names</b> | D14S46E; NRL-MAF; RP27; D14H14S46E; NRL_HUMAN; NRL; NRL_MOUSE; neural retina leucine zipper; Maf-family bZIP transcription factor NRL                                                           |
| <b>Dilution</b>    | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500                                                                                                                                      |
| <b>Storage</b>     | 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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| <b>Name</b>              | NRL                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Synonyms</b>          | D14S46E                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Function</b>          | Acts as a transcriptional activator which regulates the expression of several rod-specific genes, including RHO and PDE6B (PubMed: <a href="#">21981118</a> ). Also functions as a transcriptional coactivator, stimulating transcription mediated by the transcription factor CRX and NR2E3 (PubMed: <a href="#">17335001</a> ). Binds to the rhodopsin promoter in a sequence- specific manner (PubMed: <a href="#">17335001</a> ). |
| <b>Cellular Location</b> | Cytoplasm. Nucleus                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Tissue Location</b>   | Expressed in the brain and the retina (PubMed:11477108). Expressed strongly in rod and cone cells (at protein level) (PubMed:11477108).                                                                                                                                                                                                                                                                                               |

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