

## Rabbit Anti-PVRL1 antibody

SL11126R

| Product Name:          | PVRL1   |
|------------------------|---|
| Chinese Name:          | 脊髓灰质炎受体相关蛋白1抗体  |
| Alias:                 | CD111; CD111 antigen; CLPED1; ectodermal dysplasia 4 (Margarita Island type); ED4;<br>Herpes virus entry mediator C; Herpesvirus entry mediator C; Herpesvirus Ig like<br>receptor; Herpesvirus Ig-like receptor; HIgR; HveC; Nectin 1; Nectin-1; Nectin1; OFC7;<br>OROFACIAL CLEFT 7; Poliovirus receptor related protein 1; poliovirus receptor-like<br>1; Poliovirus receptor-related protein 1; PRR; PRR1; PVRL 1; PVRL1;<br>PVRL1_HUMAN; PVRR; PVRR1; SK-12. |
| Organism Species:      | Rabbit  |
| Clonality:             | Polyclonal  |
| React Species:         | Human,Mouse,Rat,Dog,Cow,Rabbit,   |
| Applications:          | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-<br>500IF=1:100-500 (Paraffin sections need antigen repair)<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user.   |
| Molecular weight:      | 54kDa   |
| Cellular localization: | The cell membraneSecretory protein  |
| Form:                  | Lyophilized or Liquid   |
| Concentration:         | 1mg/ml  |
| immunogen:             | KLH conjugated synthetic peptide derived from human PVRL1/CD111/Nectin1:31-<br>130/517 <extracellular></extracellular>  |
| Lsotype:               | IgG   |
| Purification:          | affinity purified by Protein A  |
| Storage Buffer:        | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.  |
| Storage:               | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.   |
| PubMed:                | PubMed  |
| Product Detail:        | Nectin is a Ca2+-independent homophilic cell adhesion molecule that belongs to the  |

immunoglobulin superfamily. Human Nectin is identical to the poliovirus receptorrelated protein (PRR) and is identified to be the alphaherpesvirus entry mediator. Nectin constitutes a family consisting of at least nectin 1, 2 and 3. Nectin 2 and 3 are ubiquitously expressed, whereas nectin 1 is abundantly expressed in the brain. Nectin 1 exists as nectin 1? and 1/HIgR, produced by alternative splicing. The cytoplasmic regions of Nectin 1?, but not Nectin 1/HIgR, have a C-terminal conserved motif (E/A-X-Y-V). This motif interacts with the PDZ domain of the F-Actin-binding protein, afadin, through which it is linked to the Actin cytoskeleton. Nectin 1, also designated HveC/ PRR1, allows the entry of herpes simplex virus type 1 (HSV-1) and HSV-2 into mammalian cells. The interaction of virus envelope glycoprotein D (gD) with nectin 1 is an essential step in the process leading to membrane fusion; the gD binding site is located at the first Ig-like domain of Nectin 1. Both the transinteraction of nectin and the interaction of nectin with afadin are necessary for their co-localization with E-cadherin and catenins at adherens junctions.

#### Function:

Promotes cell-cell contacts by forming homophilic or heterophilic trans-dimers. Heterophilic interactions have been detected between PVRL1/nectin-1 and PVRL3/nectin-3 and between PVRL1/nectin-1 and PVRL4/nectin-4.

#### Subunit:

Can form trans-heterodimers with PVRL3/nectin-3 and with PVRL4/nectin-4. Interacts (via C-terminus) with afadin (via PDZ domain); this interaction recruits PVRL1 to cadherin-based adherens junctions. Interacts with integrin alphaV/beta3. Interacts with herpes simplex virus 1 (HHV-1), herpes simplex virus 2 (HHV-2), and pseudorabies virus (PRV) envelope glycoprotein D; functions as an entry receptor for these viruses.

#### Subcellular Location:

Isoform Alpha: Cell membrane; Single-pass type I membrane protein. Isoform Delta: Cell membrane; Single-pass type I membrane protein. Isoform Gamma: Secreted.

### **DISEASE:**

Defects in PVRL1 are the cause of ectodermal dysplasia Margarita Island type (EDMI) [MIM:225060]; also known as Zlotogora-Ogur syndrome, cleft lip/palate-ectodermal dysplasia syndrome (CLPED1) or ectodermal dysplasia 4. Ectodermal dysplasia defines a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. EDMI is an autosomal recessive syndrome characterized by the association of cleft lip/palate, ectodermal dysplasia (sparse short and dry scalp hair, sparse eyebrows and eyelashes), and partial syndactyly of the fingers and/or toes. Two thirds of the patients do not manifest oral cleft but present with abnormal teeth and nails.

#### Similarity:

Belongs to the nectin family. Contains 2 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 Ig-like V-type (immunoglobulin-like) domain.

# SWISS: Q15223 Gene ID: 5818 Database links: Entrez Gene: 5818 Human Entrez Gene: 58235 Mouse jotech.com Entrez Gene: 397247 Pig Entrez Gene: 192183 Rat Omim: 600644 Human SwissProt: Q15223 Human SwissProt: Q9JKF6 Mouse SwissProt: Q9GL76 Pig Unigene: 334846 Human Unigene: 335096 Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.







