



## Rabbit Anti-Oligophrenin 1 antibody

SL11469R

<b>Product Name:</b>	Oligophrenin 1
<b>Chinese Name:</b>	精神发育迟滞相关蛋白Oligophrenin-1抗体
<b>Alias:</b>	Oligophrenin1; Oligophrenin-1; OPHN1_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Cow,Horse,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	92kDa
<b>Cellular localization:</b>	cytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Oligophrenin 1:418-465/802
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	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.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	Ras p21 can exist in either a physiologically quiescent GDP-binding state or a GTP-binding signal-emitting state (1,2). Interaction of Ras p21 with GTPase activating protein (GAP) can increase the rate of hydrolysis of Ras p21-bound GTP by as much as 1000-fold (3). In mitogenically activated and tyrosine kinase-transformed cells, Ras GAP forms a complex with a protein designated p190 (4). At its amino terminus, p190 contains sequence motifs characteristic of all known GTPases, whereas the carboxy terminus contains sequences similar to those found in the Bcr gene product, n-chimerin

and Rho GAP, all of which exhibit intrinsic GAP activity (4,5). Oligophreinein-1 is an additional protein with GTPase activating activity. Oligophreinein-1 is a RhoGAP protein that stimulates GTP hydrolysis of Rho subfamily members and is involved in cell migration, morphogenesis and axon outgrowth (6).

**Function:**

Stimulates GTP hydrolysis of members of the Rho family. Could activates GTPase targets that are known to affect cell migration and outgrowth of axons and dendrites.

**Subunit:**

Interacts with HOMER1. Interacts with AMPA receptor complexes. Interacts with SH3GL2 (endophilin-A1)

**Subcellular Location:**

Cell junction, synapse. Cell projection, axon. Cell projection, dendritic spine.  
Note=Present in both presynaptic and postsynaptic sites

**Tissue Specificity:**

Expressed in brain.

**DISEASE:**

Defects in OPHN1 are the cause of mental retardation X-linked OPHN1-related (MRXSO) [MIM:300486]; formerly designated MRX60. MRXSO is a syndromic mental retardation. Patients present mental retardation associated with cerebellar hypoplasia and distinctive facial dysmorphism.

**Similarity:**

Contains 1 PH domain.  
Contains 1 Rho-GAP domain.

**SWISS:**

O60890

**Gene ID:**

4983

**Database links:**

[Entrez Gene: 4983](#)Human

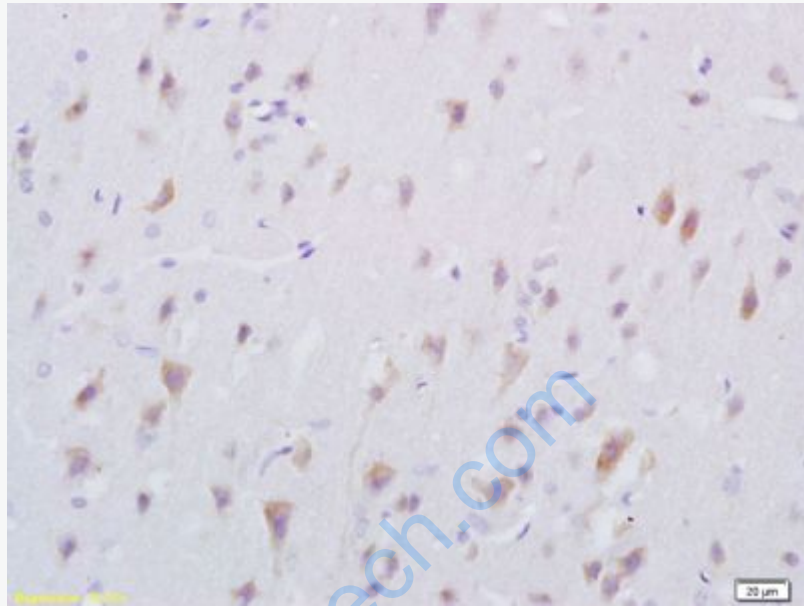
[Oimim: 300127](#)Human

[SwissProt: O60890](#)Human

**Important Note:**

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.



**Picture:**

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;  
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block  
endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer  
(normal goat serum,C-0005) at 37°C for 20 min;  
Incubation: Anti-Oligophrenin 1 Polyclonal Antibody, Unconjugated(SL11469R)  
1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-  
0023) and DAB(C-0010) staining