



Qty: 100 µg/400 µL

Rabbit anti-ApoER2

Catalog No. 40-7800

Lot No.

Rabbit anti-ApoER2

FORM

This polyclonal antibody is supplied as a 400 µL aliquot at a concentration of 0.25 mg/mL in phosphate buffered saline (pH 7.4) containing 0.1% sodium azide. This antibody is epitope-affinity purified from rabbit antiserum.

PAD: ZMD.498

IMMUNOGEN

Synthetic peptide derived from the C-terminal region of the human ApoER2 protein, which differs from mouse by two non-conservative amino acid replacements

SPECIFICITY

This antibody is specific for the ApoER2 (apolipoprotein E receptor 2, LRP8) protein, isoforms 1, 2, and 4. On Western blots, it identifies the target band at ~154 kDa.

REACTIVITY

Reactivity has been confirmed with human placenta homogenates and mouse brain homogenates.

Sample	Western Blotting	Immuno-precipitation
Human	+++	0*
Mouse	+++	ND

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)

*No reactivity observed under experimental conditions tested.

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Western Blotting: 1-3 µg/mL

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI407800

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BACKGROUND

ApoER2 (apolipoprotein E receptor 2, also known as LRP8) is a member of the LDL receptor family, characterized by a cluster of cysteine-rich class A repeats, EGF-like repeats, YWTD repeats, and an O-linked sugar domain¹. ApoER2 is expressed in brain and placenta and has several splice variants².

ApoER2 is involved in Reelin signaling, the pathway that regulates the migration of neurons along the radial glial fiber network during brain development³, and may be involved in maintaining synaptic plasticity and dendrite remodeling⁴. ApoER2 is also expressed in platelets and may inhibit aggregation by ApoE⁵. Genetic polymorphisms of ApoER2 may occur in Alzheimer's disease⁶, and *ApoER2* has been identified as one of the multiple developmental genes involved in lung tumorigenesis⁷.

REFERENCES

1. Mikhailenko I, et al. *J Cell Sci* 112:3269-3281, 1999.
2. Clatworthy AE, et al. *Neuroscience* 90:903-911, 1999.
3. Rice DS, et al. *Annu Rev Neurosci* 24:1005-1039, 2001.
4. Petit-Turcotte C, et al. *Neurobiol Aging* 26:196-206, 2005.
5. Riddell DR, et al. *J Lipid Res* 40:1925-1930, 1999.
6. Ma SL, et al. *Neurosci Lett* 332:216-218, 2002.
7. Garnis C, et al. *Hum Mol Genet* 14:475-482, 2005.

RELATED PRODUCTS

<i>Product</i>	<i>Conjugate</i>	<i>Cat. No.</i>
Protein A	Sepharose [®] 4B	10-1041
rec-Protein G	Sepharose [®] 4B	10-1241

For Research Use Only

AC050921

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI407800

(Rev 10/08) DCC-08-1089

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.