



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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**GPR4 . Rabbit Antigen Immunoaffinity Purified Polyclonal**

**BACKGROUND**

Sphingosylphosphorylcholine (SPC) and lysophosphatidylcholine (LPC) are bioactive lipid molecules involved in numerous biological processes. GPR4 shares sequence homology with OGR1 (51%), the highest of all GPCR's. GPR4 has been identified as another high affinity receptor for SPC and low affinity receptor for LPC. SPC and LPC stimulate kinase activation and DNA synthesis stimulated, both of which are pertussis toxin-sensitive, suggesting Gi-heterotrimeric G protein involvement. The GPR4 subfamily of GPCR's consists of four receptors that share significant sequence homology; OGR1, TDAG8 and G2A. G2A has been shown to be a potent transforming oncogene. GPR4 also malignantly transforms NIH3T3 cells and TDAG8 malignantly transforms the normal mammary epithelial cell line NMuMG. Overexpression of GPR4 or TDGA8 in HEK293 cells leads to transcriptional activation independent of exogenously added ligand. TDAG8 and GPR4 are also overexpressed in a range of human cancer tissues suggestive of a driving role in maintaining tumor formation.

**IMMUNOGEN**

Synthetic peptide derived from the GPR4 protein.

**POSITIVE CONTROL/TISSUE EXPRESSION**

Human brain lysate (Cat. No. X1633C)

**COMMENTS**

Antibody can be used for Western blotting (1:400 dilution). Tissue lysate should be used at 10-50 µg/lane. Other applications not yet tested. Optimal concentration should be evaluated by serial dilutions.

**ORDERING INFORMATION**

**CATALOG NUMBER**

X1638P

**SIZE**

10 Miniblots

**FORM**

Unconjugated

**HOST/CLONE**

Rabbit

**FORMULATION**

Provided as ligand affinity purified antibody in phosphate buffered saline with 0.08% sodium azide

**CONCENTRATION**

Lot specific, see vial label

**ISOTYPE**

IgG

**APPLICATIONS**

Western Blot

**SPECIES REACTIVITY**

Human

**ACCESSION NUMBER**

,

**PURIFICATION**

Antigen Immunoaffinity Purification

**SHIP CONDITIONS**

Ship on dry ice, freeze upon arrival

**STORAGE CUSTOMER**

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**REFERENCES**

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2. Yun, M.R., et al. "The action mode of lysophosphatidylcholine in human monocytes." *J. Pharmacol. Sci.* 2004, 94, 45-50
3. Bektas, M., et al. "The G protein-coupled receptor GPR4 suppresses ERK activation in a ligand-independent manner." *Biochemistry* 2003, 42, 12181-12191
4. Lum, H., et al. "Inflammatory stress increases receptor for lysophosphatidylcholine in human microvascular endothelial cells." *Am. J. Physiol. Heart Circ. Physiol.* 2003, 285, H1786-H1789
5. Xu, Y. "Sphingosylphosphorylcholine and lysophosphatidylcholine: G protein-coupled receptors and receptor-mediated signal transduction." *Biochim Biophys Acta* 2002, 1582, 81-88
6. Zhu, K., et al. "Sphingosylphosphorylcholine and lysophosphatidylcholine are ligands for the G protein-coupled receptor GPR4." *J. Biol. Chem.* 2001, 276, 41325-41335
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