Recombinant Human Protein Tyrosine Phosphatase, Receptor Type, G

Cat. No. PTPRG-1305H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant humanPTPRG is expressed in E. coli; it contains the catalytic domain of PTPRG(residues 801-1147) and has a molecular weight of 39.6 kDa.
Species	Human
Source	E.coli
ProteinLength	801-1147 a.a.
Description	PTPRG, together withPTPζ, form a distinct RPTP family. Both molecules are highly expressed in thecentral nervous system with PTPRG also expressed in some peripheral tissues.In the central nervous system, PTPRG expression is increased during corticaldevelopment, and maintained in regions containing post-mitotic neurons. Ithas been reported that PTPRG inhibits NGF-induced neurite outgrowth of PC12Dcells through modulation of p13 complex. In addition, reduced expression of PTPRGis associated with lung, ovarian and breast cancers. Human PTPRG is areceptor protein tyrosine phosphatase containing 1445 amino acids.
Form	25 mM Tris-HCl (pH8.0), 75 mM NaCl, 0.05% Tween-20, 2 mM EDTA, 1 mM DTT and 50% glycerol.Liquid at -20°C.
Purity	Greater than 95% asdetermined by Coomassie-stained SDS-PAGE gel.
Specific Activity	16 U/μg. One unitwill hydrolyze 1 nmol of p-nitrophenyl phosphate per minute at pH

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	7.4 and30°C. Assay buffer: 50 mM HEPES (pH 7.4), 2 mM EDTA, 3 mM DTT, 100 mM NaCland 50 mM pNPP.
Applications	Removal ofphosphates from target substrates. Useful for the study of enzyme kinetics,regulation and for inhibitors screening.
Storage	6 months at -20°C.
OfficialSymbol	PTPRG

GENE INFORMATION

Gene Name	PTPRG protein tyrosinephosphatase, receptor type, G [Homo sapiens]
Synonyms	PTPRG; proteintyrosine phosphatase, receptor type, G; PTPG; HPTPG; RPTPG;R-PTP-GAMMA; receptor-type tyrosine-protein phosphatase gamma; H_RG317H01.1; OTTHUMP00000213232;OTTHUMP00000213233; protein tyrosine phosphatase gamma; protein-tyrosinephosphatase gamma; receptor tyrosine phosphatase gamma; receptor-type proteinphosphatase gamma; receptor type protein tyrosine phosphatase gamma; proteintyrosine phosphatase, receptor type, gamma polypeptide
Gene ID	5793
mRNA Refseq	NM_002841
Protein Refseq	NP_002832
MIM	176886
UniProt ID	P23470

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Chromosome Location	3p21-p14
Function	hydrolase activity;identical protein binding; protein tyrosine phosphatase activity;transmembrane receptor protein tyrosine phosphatase activity
PDBrendering based on 2h4v.	

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA