

RAC1

Recombinant Human Ras-related C3 botulinum toxin substrate 1

Catalog No.	CSI11665	Quantity:	50 µg
Alternate Names:	Cell migration-inducing gene 5 protein, Ras-like protein TC25, p21-Rac1		
Description:	<p>Rho family GTPases Rac1 and Cdc42 belong to the Ras super-family of small GTP-binding proteins. Rac1 is involved in regulation of a variety of signal transduction processes, ranging from cell growth to cytoskeletal organization required for cell motility and cell adhesion. It has been shown that Rac1 is inhibited by 6-thioguanine triphosphate (6-Thio-GTP), a metabolite generated by the immunosuppressive and anti-inflammatory drug Azathioprine. In intestinal epithelial cells the pro-inflammatory mediator Leukotriene D4 induces Rac-dependent migration via 10-fold increase of Rac activation. The C-terminal deletion of five amino acids of Rac1ΔC (aa 1 - 187) includes arginine 188 which is part of the polybasic domain consisting of six contiguous basic amino acids. Deletion or mutation of the polybasic residues decrease the intrinsic GTPase activity and result in a loss of the self-stimulatory GAP activity.</p> <p>Protein preparation is 100% GDP-loaded, measured by HPLC</p>		
UniProt ID:	P63000		
Gene ID:	5879		
Source:	<i>E. coli</i>		
Molecular Weight:	20.9 kDa (187 amino acids)		
Formulation:	30 mM Tris-HCl, 5 mM DTE, pH 7.0		
Purity:	> 95% by SDS-PAGE		
Storage & Stability:	Store at -80°C for up to 1 year. Upon initial thaw, prepare aliquots and store at -80°C. Avoid freeze / thaw cycles.		

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