Data sheet

Jena Bioscience

Ran, G19V/Q69L
Ras-related nuclear protein, TC4
human, recombinant, *E. coli*

Cat. No.	Amount
PR-214	50 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form
Supplied as lyophilized powder,
Reconstitute in H_2O.

Molecular formula
KKISGRLSPIMTEQ

Molecular Weight
1588 g/mol

Purity
90 - 95% by HPLC

Description
The synthetic peptide KKISGRLSPIMTEQ can be used as a substrate for DYRK family kinases in *in vitro* kinase assays. The peptide corresponds to residues 324-334 of transcription factor FKHR with two lysine residues added at the N-terminus to facilitate binding to phosphocellulose paper.

DYRK2, a dual-specificity tyrosine-(Y)-phosphorylation regulated kinase gene, demonstrate the highest mRNA overexpression level among the genes tested in gastroesophageal and lung adenocarcinomas.
Protein kinase(s) from the DYRK family (dual specificity tyrosine phosphorylated and regulated kinase) may be involved in a new mechanism for the regulation of glycogen synthesis.

Selected References:

Woods et al. (2001) The kinase DYRK1A phosphorylates the transcription factor FKHR at Ser329 in vitro, a novel *in vivo* phosphorylation site. *Biochem. J.* **355**:597.
Miller et al. (2003) Amplification and overexpression of the dual-specificity tyrosine (Y) phosphorylation regulated kinase 2 (DYRK2) gene in esophageal and adenocarcinomas. *Cancer Res.* **63**:4136.
Skurat A.V. and Dietrich A.D. (2004) Phosphorylation of Ser640 in muscle glycogen synthase by DYRK family protein kinases. *J. Biol. Chem.* **279**:2490.