

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W Endogenous	Species Cross-Reactivity* H, M, (R)	Molecular Wt. 85 kDa	Source Rabbit**
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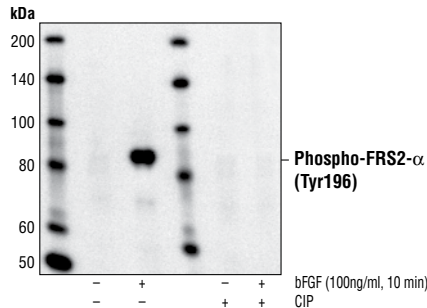
Background: Fibroblast growth factor receptor substrate 2 (FRS2, also called Suc-associated neurotrophic factor-induced tyrosine-phosphorylated target or SNT) participates in the transmission of extracellular signals from the fibroblast growth factor receptor (FGFR). Activation of the FGFR leads to tyrosine phosphorylation of FRS2 (1). Two FRS2 family members have been identified, FRS2- α (SNT1) and FRS2- β (SNT2) (2), which are phosphorylated by these RTKs. Once they are phosphorylated, they recruit SH2 domain-containing proteins including Grb2 and SHP-2 (3,4), mediating downstream signaling. Tyr436 is required for efficient SHP-2 recruitment (5), whereas Tyr196 functions as a docking site for Grb2-Sos complexes (6).

Specificity/Sensitivity: Phospho-FRS2- α (Tyr196) Antibody detects endogenous levels of FRS2- α only when phosphorylated at tyrosine 196. The antibody may also detect a non-specific band at 65kDa.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr196 of human FRS2- α . Antibodies are purified by protein A and peptide affinity chromatography.

Background References:

- (1) Kouhara, H. et al. (1997) *Cell* 89, 693–702.
- (2) Ong, S.H. et al. (2000) *Mol. Cell. Biol.* 20, 979–989.
- (3) Kontaridis, M.I. et al. (2002) *Mol. Cell. Biol.* 22, 3875–3891.
- (4) Xu, H. and Goldfarb, M. (2001) *J. Biol. Chem.* 276, 13049–13056.
- (5) Hadari, Y.R. et al. (1998) *Mol. Cell. Biol.* 18, 3966–3973.
- (6) Kouhara, M. et al. (1997) *Cell* 89, 693–702.



Western blot analysis of extracts from NIH/3T3 cells, untreated or stimulated with bFGF and/or treated with calf intestinal phosphatase (CIP) as indicated, using Phospho-FRS2- α (Tyr196) Antibody.

Entrez-Gene ID # 10818
Swiss-Prot Acc. # Q8WU20

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 μ g/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western Blotting 1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
 Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.