

**#3864** Store at -20C

## Phospho-FRS2- $\alpha$ (Tyr196) Antibody


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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	H M	Endogenous	85	Rabbit	#Q8WU20	10818

### Product Usage Information

#### Application

Western Blotting

#### Dilution

1:1000

### Storage

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

### Specificity / Sensitivity

Phospho-FRS2- $\alpha$  (Tyr196) Antibody detects endogenous levels of FRS2- $\alpha$  only when phosphorylated at tyrosine 196. The antibody may also detect a non-specific band at 65kDa.

### Species predicted to react based on 100% sequence homology:

Rat

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr196 of human FRS2- $\alpha$ . Antibodies are purified by protein A and peptide affinity chromatography.

### 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-alpha (SNT1) and FRS2-beta (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).

### Background References

1. Kauhara, 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. Kauhara, M. et al. (1997) *Cell* 89, 693-702.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

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

### Applications Key

**WB:** Western Blotting

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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