#3918 Store at -20°C

Phospho-IGF-I Receptor β (Tyr1135) (DA7A8) Rabbit mAb

☑ 100 µl
(10 western blots)

Cell Signaling TECHNOLOGY®

Orders ■ 877-616-CELL (2355)
orders@cellsignal.com
Support ■ 877-678-TECH (8324)
info@cellsignal.com
Web ■ www.cellsignal.com

rev. 08/23/12

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

Entrez-Gene ID #3479
Swiss-Prot Acc. #P08069

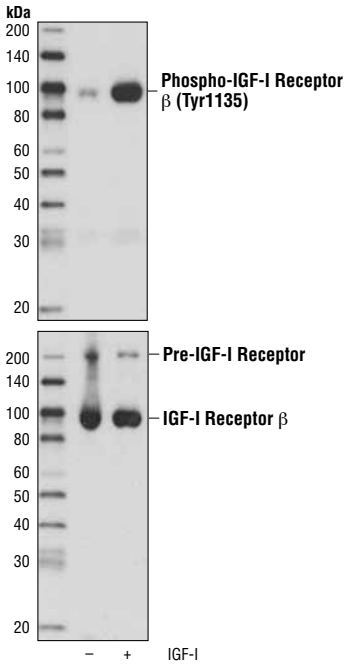
Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W Endogenous	H, M, R	95 kDa	Rabbit IgG**

Background: Type I insulin-like growth factor receptor (IGF-IR) is a transmembrane receptor tyrosine kinase that is widely expressed in many cell lines and cell types within fetal and postnatal tissues (1-3). Receptor autophosphorylation follows binding of the IGF-I and IGF-II ligands. Three tyrosine residues within the kinase domain (Tyr1131, Tyr1135 and Tyr1136) are the earliest major autophosphorylation sites (4). Phosphorylation of these three tyrosine residues is necessary for kinase activation (5,6).

Insulin receptors (IRs) share significant structural and functional similarity with IGF-I receptors, including the presence of an equivalent tyrosine cluster (Tyr1146/1150/1151) within the kinase domain activation loop. Tyrosine autophosphorylation of the insulin receptor is one of the earliest cellular responses to insulin stimulation (7). Autophosphorylation begins with phosphorylation of Tyr1146 and either Tyr1150 or Tyr1151, while full kinase activation requires triple tyrosine phosphorylation (8).

Specificity/Sensitivity: Phospho-IGF-I Receptor β (Tyr1135) (DA7A8) Rabbit mAb detects endogenous levels of IGF-I receptor only when phosphorylated at Tyr1135. This antibody cross-reacts with Tyr1150 of insulin receptor and may also cross-react with other overexpressed related tyrosine-phosphorylated tyrosine kinases.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr1135 of human IGF-I receptor β.



Western blot analysis of extracts from MCF7 cells, untreated or stimulated with IGF-I, using Phospho-IGF-I Receptor (Tyr1135) (DA7A8) Rabbit mAb (upper) and IGF-I Receptor β Antibody #3027 (lower).

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. 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.

Background References:

(1) Adams, T.E. et al. (2000) *Cell. Mol. Life Sci.* 57, 1050–1093.

(2) Baserga, R. et al. (2000) *Oncogene* 19, 5574–5581.

(3) Scheidegger, K.J. et al. (2000) *J. Biol. Chem.* 275, 38921–38928.

(4) Hernandez-Sanchez, C. et al. (1995) *J. Biol. Chem.* 270, 29176–29181.

(5) Lopaczynski, W. et al. (2000) *Biochem. Biophys. Res. Commun.* 279, 955–960.

(6) Baserga, R. et al. (1999) *Exp. Cell Res.* 253, 1–6.

(7) White, M.F. et al. (1985) *J. Biol. Chem.* 260, 9470–9478.

(8) White, M.F. et al. (1988) *J. Biol. Chem.* 263, 2969–2980.

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.

#9750 Store at -20°C

IGF-I Receptor β (D23H3) XP® Rabbit mAb

Cell Signaling TECHNOLOGY®

☐ Small 100 µl (10 western blots)
☐ Petite 40 µl (4 western blots)

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rev. 02/06/12

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Entrez-Gene ID #3480
Swiss-Prot Acc. #P08069

Applications	Species Cross-Reactivity*	Molecular Wt.	Isotype
W, IP, IF-IC, F Endogenous	H, M, R, Mk	95 kDa	Rabbit IgG**

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. 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
Immunoprecipitation	1:100
Immunofluorescence (IF-IC)	1:1600
Flow Cytometry	1:400

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.

Background: Type I insulin-like growth factor receptor (IGF-IR) is a transmembrane receptor tyrosine kinase that is widely expressed in many cell lines and cell types within fetal and postnatal tissues (1-3). Receptor autophosphorylation follows binding of the IGF-I and IGF-II ligands. Three tyrosine residues within the kinase domain (Tyr1131, Tyr1135, and Tyr1136) are the earliest major autophosphorylation sites (4). Phosphorylation of these three tyrosine residues is necessary for kinase activation (5,6). Insulin receptors (IRs) share significant structural and functional similarity with IGF-I receptors, including the presence of an equivalent tyrosine cluster (Tyr1146/1150/1151) within the kinase domain activation loop. Tyrosine autophosphorylation of IRs is one of the earliest cellular responses to insulin stimulation (7). Autophosphorylation begins with phosphorylation of Tyr1146 and either Tyr1150 or Tyr1151, while full kinase activation requires triple tyrosine phosphorylation (8).

Specificity/Sensitivity: IGF-I Receptor β (D23H3) XP® Rabbit mAb detects endogenous levels of total IGF-I receptor β protein. This antibody does not cross-react with insulin receptor.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human IGF-I receptor β protein.

Background References:

(1) Adams, T.E. et al. (2000) *Cell. Mol. Life Sci.* 57, 1050-1093.

(2) Baserga, R. et al. (2000) *Oncogene* 19, 5574-5581.

(3) Scheidegger, K.J. et al. (2000) *J. Biol. Chem.* 275, 38921-38928.

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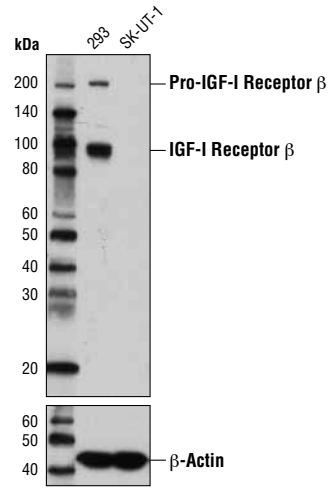
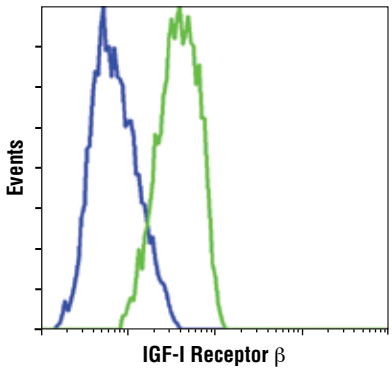
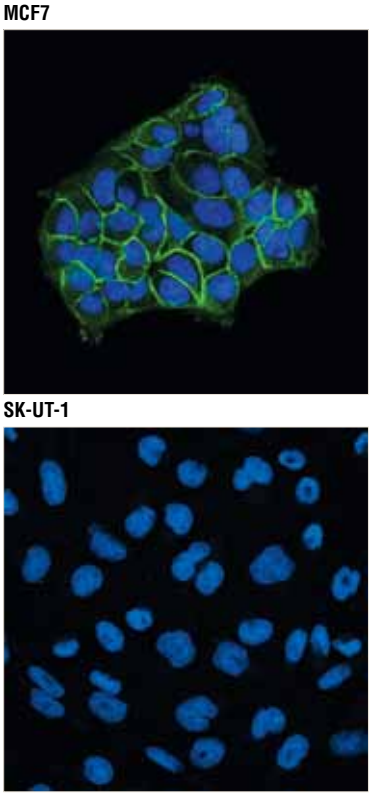


Western blot analysis of extracts from 293 (IGF-I receptor β+) and SK-UT-1 (IGF-I receptor β-) cells using IGF-I Receptor β (D23H3) XP® Rabbit mAb (upper) or β-Actin Antibody #4967 (lower).



Flow cytometric analysis of SK-UT-1 (blue) and MCF7 (green) cells using IGF-I Receptor β (D23H3) XP® Rabbit mAb.

Confocal immunofluorescent analysis of MCF7 (upper) and SK-UT-1 (lower) cells using IGF-I Receptor β (D23H3) XP® Rabbit mAb (green). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).



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.

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