

#14074 Store at -20°C

YAP (D8H1X) XP® Rabbit mAb



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, W-S, IP, IHC-Bond, IHC-P, IF-F, IF-IC, FC-FP, ChIP, ChIP-seq, C&R	H M R Hm Mk	Endogenous	65-78	Rabbit IgG	#P46937	10413

Product Usage Information

For optimal ChIP and ChIP-seq results, use 10 µl of antibody and 10 µg of chromatin (approximately 4 x 10⁶ cells) per IP. This antibody has been validated using SimpleChIP® Enzymatic Chromatin IP Kits.

The CUT&RUN dilution was determined using CUT&RUN Assay Kit #86652.

Application	Dilution
Western Blotting	1:1000
Simple Western™	1:10 - 1:50
Immunoprecipitation	1:50
IHC Leica Bond	1:100 - 1:400
Immunohistochemistry (Paraffin)	1:200 - 1:800
Immunofluorescence (Frozen)	1:50 - 1:200
Immunofluorescence (Immunocytochemistry)	1:50 - 1:200
Flow Cytometry (Fixed/Permeabilized)	1:50 - 1:200
Chromatin IP	1:50
Chromatin IP-seq	1:50
CUT&RUN	1:50

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.

Specificity / Sensitivity

For a carrier free (BSA and azide free) version of this product see product #53921.

YAP (D8H1X) XP® Rabbit mAb recognizes endogenous levels of total YAP protein. Non-specific labeling of membrane within fixed frozen mouse small intestine may be observed by immunofluorescence.

Species predicted to react based on 100% sequence homology:

Bovine, Horse, Guinea Pig

Source / Purification

Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the carboxy terminus of human YAP protein. The epitope corresponds to a region surrounding Pro435 of human YAP isoform 1. This sequence region is 100% conserved among all known isoforms of human YAP protein.

Background

YAP (Yes-associated protein, YAP65) was first identified based on its ability to associate with the SH3 domain of Yes. It also binds to other SH3 domain-containing proteins such as Nck, Crk, Src, and Abl (1). In addition to the SH3 binding motif, YAP contains a PDZ interaction motif, a coiled-coil domain, and WW domains (2-4). While initial studies of YAP all pointed towards a role in anchoring and targeting to specific subcellular compartments, subsequent studies showed that YAP is a transcriptional co-activator by virtue of its WW domain interacting with the PY motif (PPxY) of the transcription factor PEBP2 and other transcription factors (5). In its capacity as a transcriptional co-activator, YAP is now widely recognized as a central mediator of the Hippo Pathway, which plays a fundamental and widely conserved role in regulating tissue growth and organ size (6-8). Phosphorylation at multiple sites (e.g., Ser109, Ser127) by LATS kinases promotes YAP translocation from the nucleus to the cytoplasm, where it is sequestered through

association with 14-3-3 proteins (7-9). These LATS-driven phosphorylation events serve to prime YAP for subsequent phosphorylation by CK1δ/ε in an adjacent phosphodegron, triggering proteasomal degradation of YAP (10).

Background References

1. Sudol, M. (1994) *Oncogene* 9, 2145-52.
2. Mohler, P.J. et al. (1999) *J Cell Biol* 147, 879-90.
3. Espanel, X. and Sudol, M. (2001) *J Biol Chem* 276, 14514-23.
4. Sudol, M. et al. (1995) *FEBS Lett* 369, 67-71.
5. Yagi, R. et al. (1999) *EMBO J* 18, 2551-62.
6. Dong, J. et al. (2007) *Cell* 130, 1120-33.
7. Zhao, B. et al. (2010) *Genes Dev* 24, 862-74.
8. Zhao, B. et al. (2007) *Genes Dev* 21, 2747-61.
9. Yu, F.X. et al. (2012) *Cell* 150, 780-91.
10. Zhao, B. et al. (2010) *Genes Dev* 24, 72-85.

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 **W-S:** Simple Western™ **IP:** Immunoprecipitation **IHC-Bond:** IHC Leica Bond
IHC-P: Immunohistochemistry (Paraffin) **IF-F:** Immunofluorescence (Frozen)
IF-IC: Immunofluorescence (Immunocytochemistry) **FC-FP:** Flow Cytometry (Fixed/Permeabilized)
ChIP: Chromatin IP **ChIP-seq:** Chromatin IP-seq **C&R:** CUT&RUN

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

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.
 Alexa Fluor is a registered trademark of Life Technologies Corporation.
 All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.