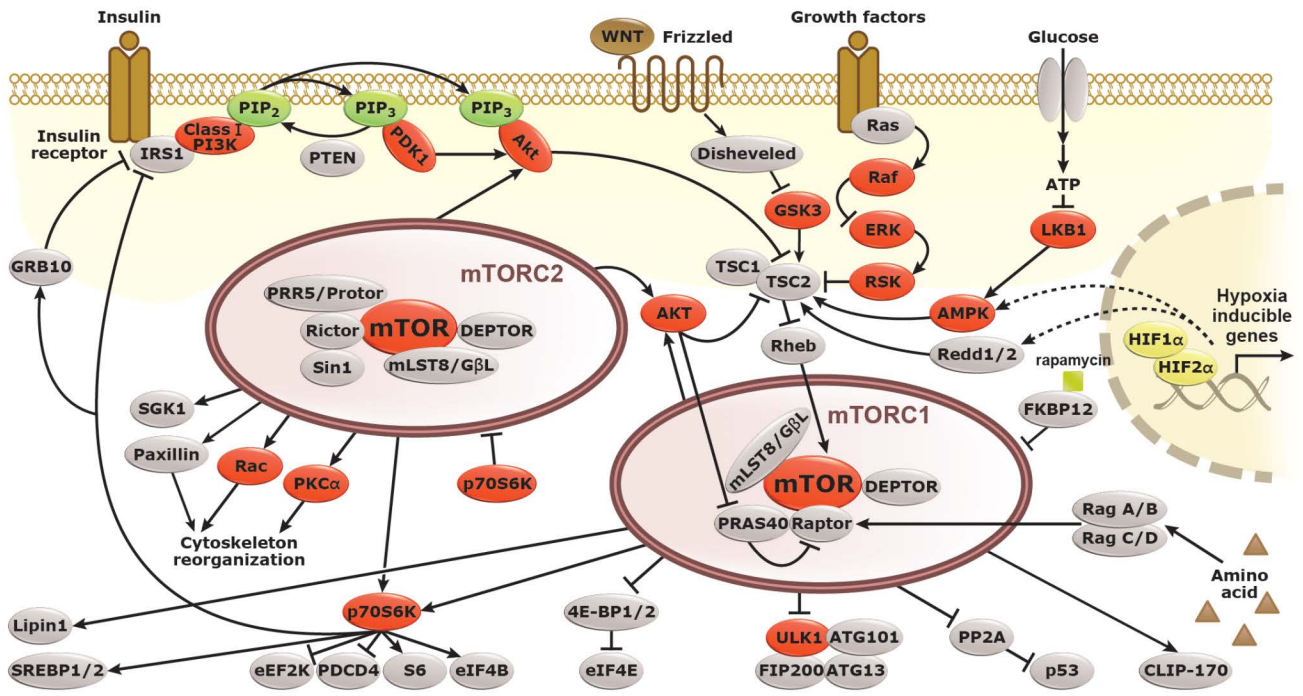


- Your Expertise
- Our Antibodies
- Accelerated Discovery

# mTOR Signaling Pathway

[www.genetex.com](http://www.genetex.com)

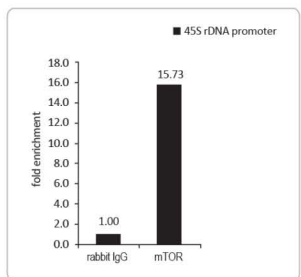


■ Kinase    
 ■ Transcription Factor    
 - - - - -> Translocate    
 - - - - -| Inhibit in certain conditions

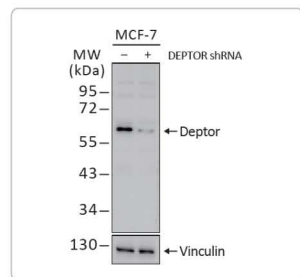
The mammalian target of rapamycin (mTOR) has been identified as the critical downstream mediator of AKT's oncogenic properties. Together with the proteins GβL, Raptor and PRAS40, mTOR forms the mTORC1 complex. This complex induces cell growth by stimulating protein synthesis, driving cell cycle progression and inhibiting autophagy. mTOR can also associate with different proteins to form a functionally distinct complex, the rapamycin-insensitive mTORC2. It has recently been discovered that mTORC2 directly phosphorylates and activates AKT, indicating that mTOR has a complicated role both upstream and downstream of AKT.


## Highlighted Products

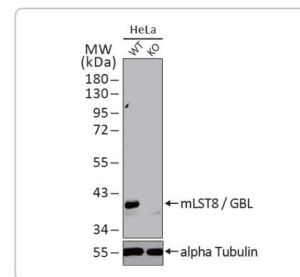
-  Citation Support
-  KO/KD Validation
-  Orthogonal Validation



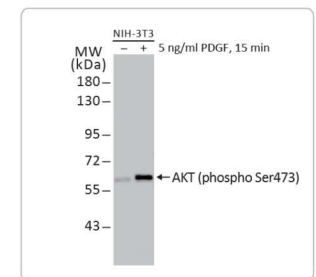
mTOR antibody [C3], C-term (GTX101557)   



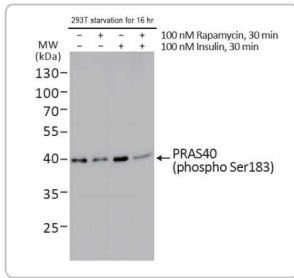
Deptor antibody [N1C3] (GTX116540) 



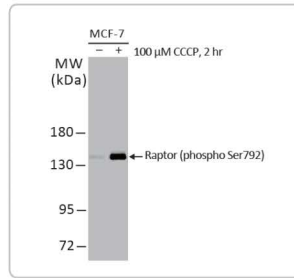
mLST8 / GβL antibody (GTX132580) 



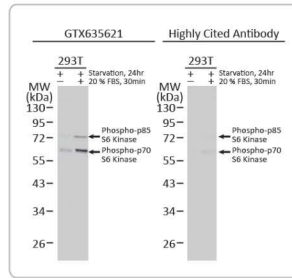
AKT (phospho Ser473) antibody (GTX128414)  



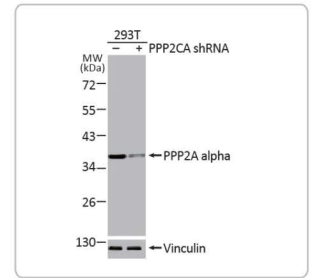
PRAS40 (phospho Ser183) antibody (GTX132277)



Raptor (phospho Ser792) antibody (GTX133196)



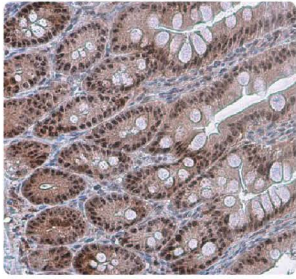
p70 S6K (phospho Thr421/Ser424) antibody [HL129] (GTX635621)



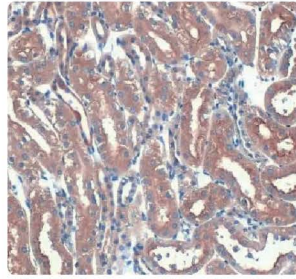
PP2A alpha antibody [HL1447] (GTX636919)

	Cat. No.	Product Name	Clonality	Reactivity	Applications
4E-BP1	GTX109162	4E-BP1 antibody [N1C3]	Rb pAb	Hu,Rat	WB, IHC-P, IP
	GTX133182	4E-BP1 (phospho Thr37/Thr46) antibody	Rb pAb	Hu,Ms,Rat	WB
	GTX133184	4E-BP1 (phospho Ser65) antibody	Rb pAb	Hu	WB
AKT	GTX121937	AKT antibody [N3C2], Internal	Rb pAb	Hu,Ms,Rat,Pig,Japanese Medaka	WB, ICC/IF, IHC-P, IHC-Fr, IP, IHC
	GTX133175	AKT (phospho Thr450) antibody	Rb pAb	Hu,Ms,Rat	WB
	GTX128414	AKT (phospho Ser473) antibody	Rb pAb	Hu,Ms,Rat,Pig	WB, ICC/IF, IHC-P, IP
	GTX110613	AKT1 antibody	Rb pAb	Hu,Ms	WB, IHC-P, IP
	GTX636413	AKT1 antibody [HL1142]	Rec Rb mAb	Hu,Rat	WB, ICC/IF, IHC-P
	GTX128457	AKT2 antibody	Rb pAb	Hu,Ms,Rat	WB
	GTX113312	AKT3 antibody	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
AMPK	GTX112999	AMPK alpha 1 antibody	Rb pAb	Hu,Ms	WB
	GTX103487	AMPK alpha 2 antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP
	GTX130429	AMPK alpha 1 (phospho Thr183) + AMPK alpha 2 (phospho Thr172) antibody	Rb pAb	Hu,Ms	WB
	GTX134594	AMPK beta 1 antibody	Rb pAb	Hu	WB
	GTX32439	AMPK beta 2 antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	GTX101661	AMPK gamma 1 antibody	Rb pAb	Hu,Ms	WB, IP
ATG	GTX114178	AMPK gamma 2 antibody [C2C3], C-term	Rb pAb	Hu,Ms	WB, IHC-P
	GTX132435	ATG101 antibody	Rb pAb	Hu	WB, IHC-P
	GTX85183	ATG13 antibody	Rb pAb	Hu,Ms,Rat	WB, IHC-P, ELISA
CLIP170	GTX117504	CLIP170 antibody [N1], N-term	Rb pAb	Hu,Ms,Rat	WB, ICC/IF
Deptor	GTX116540	Deptor antibody [N1C3]	Rb pAb	Hu	WB
eEF2K	GTX111496	eEF2K antibody [N1N3]	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	GTX32365	eEF2K (phospho Ser366) antibody	Rb pAb	Hu	WB, IHC-P
eIF4B	GTX112612	eIF4B antibody [N1N2], N-term	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
eIF4E	GTX133606	eIF4E (phospho Ser209) antibody	Rb pAb	Hu,Ms	WB
	GTX637028	eIF4E antibody [HL1553]	Rec Rb mAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
ERK	GTX100699	ERK1 antibody	Rb pAb	Hu	WB
	GTX635617	ERK1 (phospho Thr202/Tyr204) + ERK2 (phospho Thr185/Tyr187) antibody [HL173]	Rec Rb mAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	GTX113094	ERK2 antibody [N2C3]	Rb pAb	Hu,Ms,Rat,Pig	WB, IHC-P, IP
	GTX134462	ERK1/2 antibody	Rb pAb	Hu,Ms,Rat	WB
FIP200	GTX129093	FIP200 antibody	Rb pAb	Hu	WB, ICC/IF, IHC-P
FKBP12	GTX31576	FKBP12 antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, ELISA
FOXO3A	GTX100277	FOXO3A antibody [C3], C-term	Rb pAb	Hu,Ms,Rat,Squirrel,Xenopus	WB, ICC/IF, IHC-P, IP
GRB10	GTX125980	GRB10 antibody	Rb pAb	Hu	WB, IHC-P
	GTX32187	GRB10 (phospho Tyr67) antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF
GSK3	GTX111192	GSK3 beta antibody [C1C3]	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	GTX50090	GSK3 beta (phospho Ser9) antibody	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
	GTX132997	GSK3 alpha (phospho Ser21) + GSK3 beta (phospho Ser9) antibody	Rb pAb	Hu,Ms	WB, IHC-Fr
	GTX79063	GSK3 alpha (phospho Tyr279) + GSK3 beta (phospho Tyr216) antibody	Rb pAb	Hu	WB, IHC-P

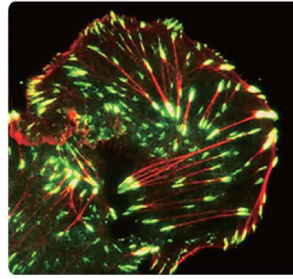




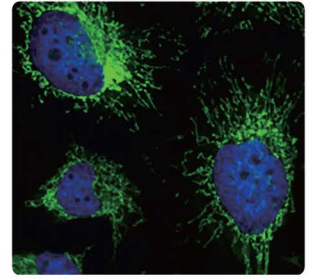
PDCD4 (phospho Ser457) antibody (GTX132798)



eIF4E antibody [HL1553] (GTX637028)

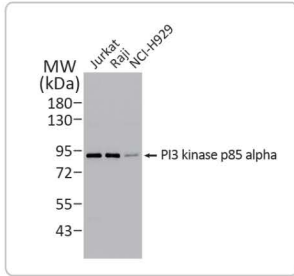




Paxillin antibody (GTX125891)

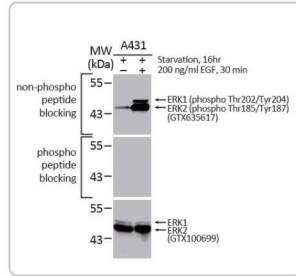







FIP200 antibody (GTX129093)

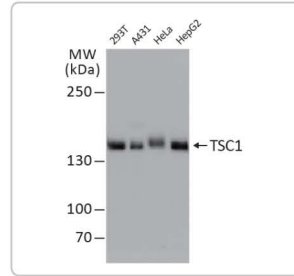
	Cat. No.	Product Name	Clonality	Reactivity	Applications
HIF	GTX127309	HIF1 alpha antibody	Rb pAb	Hu,Ms,Rat,Rb,Bov	WB, ICC/IF, IHC-P, IHC-Fr, IP, ChIP assay
	GTX632015	HIF2 alpha antibody [GT125]	Ms mAb	Hu,Ms,Rat	WB, ICC/IF, IP
IRS1	GTX133848	IRS1 (phospho Ser307) antibody	Rb pAb	Hu,Ms,Rat	WB, IHC-P
	GTX113213	IRS1 antibody [C2C3], C-term	Rb pAb	Hu	WB, IHC-P
Lipin 1	GTX107992	Lipin 1 antibody [C3], C-term	Rb pAb	Hu	WB, ICC/IF, IHC-P
	GTX115676	Lipin 1 antibody [N3C2], Internal	Rb pAb	Hu,Ms	WB
LKB1	GTX130697	LKB1 antibody	Rb pAb	Hu,Ms	WB, IHC-P
	GTX30765	LKB1 (phospho Ser428) antibody	Rb pAb	Hu,Ms,Mk	WB, IHC-P
mLST8	GTX132580	mLST8 / GBL antibody	Rb pAb	Hu,Ms,Rat	WB, IHC-P
mTOR	GTX101557	mTOR antibody [C3], C-term	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP, ChIP assay
	GTX132803	mTOR (phospho Ser2448) antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	GTX133190	mTOR (phospho Ser2481) antibody	Rb pAb	Hu	WB
p53	GTX70214	p53 antibody [DO1]	Ms mAb	Hu,Ms	WB, ICC/IF, IHC-P, IHC-Fr, FACS, IP, ELISA
	GTX102965	p53 antibody	Rb pAb	Hu,Ms,Zfsh	WB, ICC/IF, IHC-P, IP, ChIP assay
	GTX133905	p53 (phospho Ser6) antibody	Rb pAb	Hu	WB
	GTX132995	p53 (phospho Ser15) antibody	Rb pAb	Hu	WB, ICC/IF
	GTX133904	p53 (phospho ser392) antibody	Rb pAb	Hu	WB
p70 S6K	GTX107562	p70 S6K antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	GTX635621	p70 S6K (phospho Thr421/Ser424) antibody [HL129]	Rec Rb mAb	Hu,Ms,Rat	WB, IHC-P
p90 RSK	GTX111050	p90 RSK1 antibody	Rb pAb	Hu	WB, ICC/IF, IHC-P
	GTX133531	p90 RSK1 (phospho Thr359) antibody	Rb pAb	Hu	WB
	GTX133467	p90 RSK1 (phospho Ser380) antibody	Rb pAb	Hu	WB
	GTX133612	p90 RSK1 (phospho Thr573) antibody	Rb pAb	Hu	WB
	GTX111302	RSK2 antibody	Rb pAb	Hu,Ms,Rat	WB, IHC-P
	GTX133470	RSK2 (phospho Ser227) antibody	Rb pAb	Hu,Ms	WB
Paxillin	GTX125891	Paxillin antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP
	GTX132154	Paxillin (phospho Tyr31) antibody	Rb pAb	Hu	WB, ICC/IF
	GTX633633	Paxillin (phospho Tyr118) antibody [GT712]	Ms mAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	GTX132362	Paxillin (phospho Ser273) antibody	Rb pAb	Hu,Ms	WB
PDCD4	GTX104901	PDCD4 antibody	Rb pAb	Hu,Ms	WB, ICC/IF
	GTX132798	PDCD4 (phospho Ser457) antibody	Rb pAb	Ms,Rat	WB, IHC-P
PDPK1	GTX134679	PDPK1 / PDK1 antibody	Rb pAb	Hu,Ms	WB, ICC/IF
PI3K	GTX100462	PI3 kinase p110 alpha antibody	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
	GTX133757	PI3 kinase p110 delta antibody	Rb pAb	Hu	WB
	GTX132597	PI3 kinase p85 (phospho Tyr467)/p55 (phospho Tyr199) antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF
	GTX636880	PI3 kinase p85 alpha antibody [HL1414]	Rec Rb mAb	Hu,Ms	WB, ICC/IF, IHC-P
PKC alpha	GTX130453	PKC alpha antibody	Rb pAb	Hu,Ms,Rat,Zfsh	WB, ICC/IF, IHC-Fr
	GTX130433	PKC alpha (phospho Thr497) antibody	Rb pAb	Hu	WB
	GTX133936	PKC alpha (phospho Ser657) antibody	Rb pAb	Hu,Rat	WB
PP2A	GTX636919	PP2A alpha antibody [HL1447]	Rec Rb mAb	Hu,Ms,Rat	WB, IHC-P
	GTX106334	PP2A alpha antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP
	GTX101690	PP2A beta antibody	Rb pAb	Hu,Ms	WB, ICC/IF
	GTX133709	PP2A alpha + PP2A beta antibody	Rb pAb	Hu,Ms,Rat	WB, IHC-P



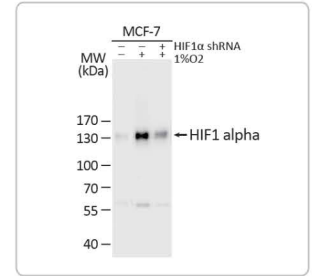
PI3 kinase p85 alpha antibody [HL1414] (GTX636880)  














































ERK1 (phospho Thr202/Tyr204) + ERK2 (phospho Thr185/Tyr187) antibody [HL173] (GTX635617)     



Hamartin / TSC1 antibody (GTX130062) 



HIF1 alpha antibody (GTX127309)      

	Cat. No.	Product Name	Clonality	Reactivity	Applications
PRAS40	GTX118391	PRAS40 antibody	Rb pAb	Hu,Ms	WB, IHC-P
	 GTX132277	PRAS40 (phospho Ser183) antibody	Rb pAb	Hu	WB
	 GTX133176	PRAS40 (phospho Thr246) antibody	Rb pAb	Hu,Ms	WB
Protor 1	 GTX124197	Protor 1 antibody	Rb pAb	Hu,Ms	WB
PTEN	  GTX101025	PTEN antibody	Rb pAb	Hu,Ms,Rat,Pig	WB, ICC/IF, IHC-P
	  GTX130418	PTEN (phospho Thr366/Ser370) antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF
Rac	  GTX100761	Rac1 antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	GTX113262	Rac2 antibody [N1C3]	Rb pAb	Hu,Ms	WB, IHC-P
Raf	GTX101427	A-Raf antibody [C1C3]	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
	   GTX637085	B-Raf antibody [HL1606]	Rec Rb mAb	Hu	WB, IHC-P
	  GTX107763	Raf1 antibody [N3C3]	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
	  GTX24767	Raf1 (phospho Ser621) antibody	Rb pAb	Hu,Rat	WB, FACS, IP
Rag	GTX55848	RagA/B antibody	Rb pAb	Hu,Ms,Rat	WB, IHC-P
	GTX133562	Rag C antibody	Rb pAb	Hu,Ms	WB
Raptor	 GTX132303	Raptor antibody	Rb pAb	Hu,Rat	WB, IHC-P, IP
	 GTX133196	Raptor (phospho Ser792) antibody	Rb pAb	Hu	WB
Ras	   GTX116041	H-Ras antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP
	 GTX108598	N-RAS antibody	Rb pAb	Hu,Ms,Rat	WB
	 GTX132480	RAS antibody	Rb pAb	Hu,Ms,Rat,Zfsh,Goat,Frg,Squirrel	WB, IHC-P
REDD1	  GTX64553	REDD1 antibody	Rb pAb	Hu	WB
Rheb	GTX634335	Rheb antibody [GT39810]	Ms mAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
RICTOR	  GTX104617	RICTOR antibody [C3], C-term	Rb pAb	Hu	WB, ICC/IF, IHC-P, IHC
SGK1	GTX32413	SGK1 (phospho Ser422) antibody	Rb pAb	Hu	WB, ICC/IF, IHC-P
	GTX107750	SGK1 antibody	Rb pAb	Hu,Ms	WB
SREBP1	  GTX79299	SREBP1 antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF
TSC	  GTX130062	Hamartin / TSC1 antibody	Rb pAb	Hu,Ms	WB, IHC-P, IP
	GTX78927	TSC2 (phospho Ser1254) antibody	Rb pAb	Hu	IHC-P
	GTX54996	TSC2 (phospho Ser939) antibody	Rb pAb	Hu,Ms	WB, IHC-P
	  GTX130511	TSC2 antibody	Rb pAb	Hu	WB, IP
ULK	  GTX132669	ULK1 antibody	Rb pAb	Hu	WB
	 GTX132654	ULK1 (phospho Ser758) antibody	Rb pAb	Hu	WB
	 GTX111476	ULK2 antibody [C2C3], C-term	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	GTX105365	ULK4 antibody [N2C1], Internal	Rb pAb	Hu	WB, IHC-P

 Citation Support  KO/KD Validation  Comparable Abs  IP/MS Analysis  Orthogonal Validation  Protein Overexpression  Recombinant

GeneTex

International  
USA

Tel: 886.3.6208988  
Tel: 1.949.553.1900

Toll-free: 1.877.436.3839

