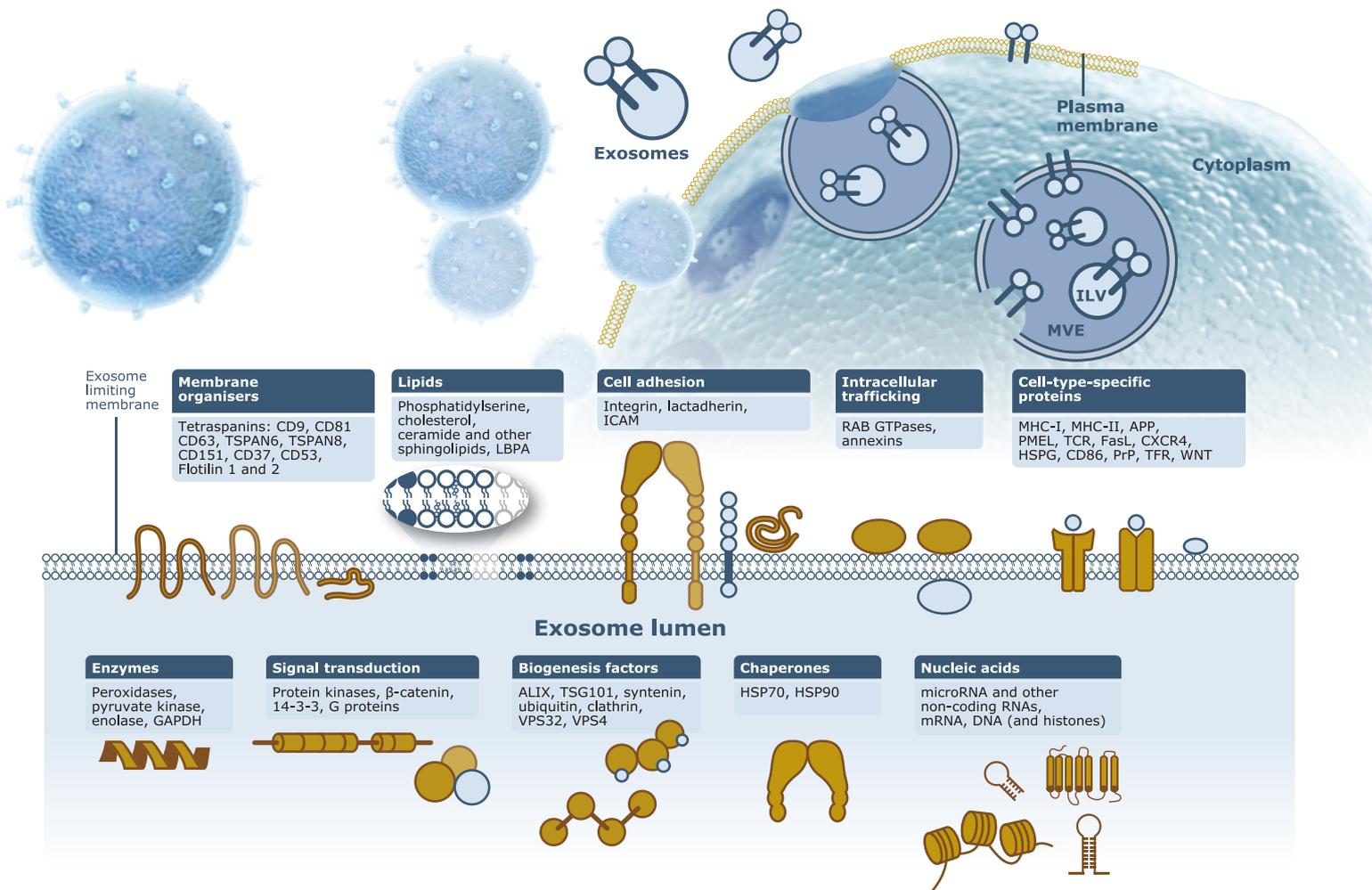


外泌體 Exosome 抗體選擇指南

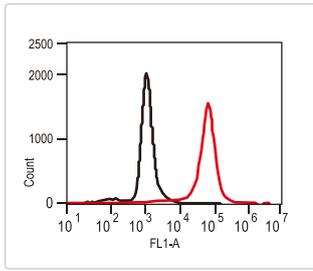
外泌體(exosome)是細胞外囊泡(extracellular vesicles)的一種，外泌體(exosome)大小(約30-150奈米)，其脂質雙層膜囊泡內攜帶核酸、蛋白質、醣類、脂質等多種訊號因子，作為細胞間信號傳遞的媒介以調控生理與病理機制，使其成為疾病診斷與治療研究發展受到矚目。

經過這幾年的研究得知外泌體(exosome)分泌影響細胞間微環境甚至透過循環系統改變遠端細胞生理功能，在病理狀態，例如：發炎、細胞變性、免疫變化、癌症等條件下釋放的外泌體含有特定生物成分，包括表面蛋白或小分子核糖核酸等標記，可應用為臨床疾病診斷、疾病嚴重程度分期或評估治療反應的指標。目前登錄於臨床試驗網站以外泌體發展為疾病檢測臨床試驗案有感染、各式癌症、心血管、婦產、神經退化等疾病。

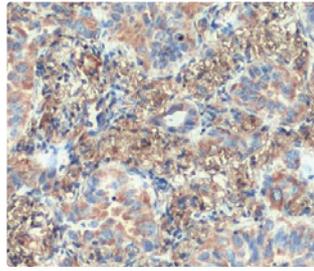
根據國際細胞外囊泡學會(ISEV)在2014年的提議，外泌體鑑定3個主要方法：穿透式電子顯微鏡(transmission electron microscope, TEM)、粒徑分析(Nanoparticle Tracking Analysis, NTA)、蛋白標記(Western Blot, WB)，而選擇正確且優良的外泌體(exosome)抗體正是最有效率的研究工具。



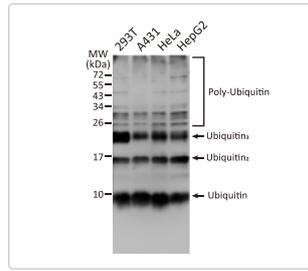
Selected Products



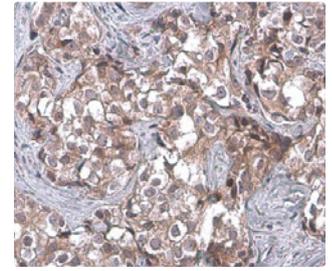
CD81 antibody
(GTX101766)    



VPS35 antibody [HL1017]
(GTX635821)  



Ubiquitin antibody [GT7811]
(GTX630148)    

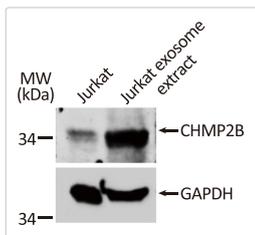


TSG101 antibody [4A10]
(GTX70255)    

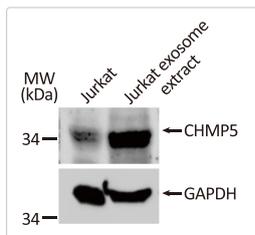
	Cat. No.	Product Name	Clonality	Reactivity	Applications	
Membrane Organizer	GTX135296	CD9 antibody	Rb pAb	Hu	WB, ICC/IF, IHC-P	
	 GTX129598	CD37 antibody	Rb pAb	Hu	WB	
	GTX79942	CD53 antibody [MEM-53] (PE)	Ms mAb	Hu	FACS	
	  GTX132953	CD63 antibody	Rb pAb	Hu	WB, IHC-P	
	GTX135220	CD63 antibody	Rb pAb	Hu	WB, ICC/IF	
	  GTX637264	CD81 antibody [HL1666]	Rec Rb mAb	Hu	WB, ICC/IF	
	   GTX101766	CD81 antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, FACS, Blocking	
	 GTX42394	CD151 antibody [11G5a]	Ms mAb	Hu	WB, IHC-P, IHC-Fr, FACS, IP, ELISA	
	  GTX104769	Flotillin 1 antibody [C3], C-term	Rb pAb	Hu,Hm	WB, IP	
	 GTX100279	Flotillin 2 antibody [C3], C-term	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP	
 GTX114411	Flotillin 2 antibody [N1C1]	Rb pAb	Hu,Ms	WB, IHC-P, IP		
	GTX111881	TSPAN6 antibody [C1C3]	Rb pAb	Hu	WB	
	GTX56175	TM4SF3 / TSPAN8 antibody	Rb pAb	Hu	WB, IHC-P	
Cell Adhesion	  GTX100450	ICAM1 / CD54 antibody [N1C2]	Rb pAb	Hu,Rat	WB, IHC-P	
	    GTX636657	Integrin beta 1 / CD29 antibody [HL1255]	Rec Rb mAb	Hu,Ms,Cat,Dog	WB, IHC-P	
	   GTX636658	Integrin beta 1 / CD29 antibody [HL1256]	Rec Rb mAb	Hu,Cat,Dog	WB, ICC/IF	
	   GTX128839	Integrin beta 1 / CD29 antibody	Rb pAb	Hu,Ms,Rat,Dog	WB, ICC/IF, IHC-P, IHC-Fr, IP	
	   GTX112971	Integrin beta 1 / CD29 antibody	Rb pAb	Hu,Ms,Dog	WB, ICC/IF, IHC-P	
	 GTX43357	Integrin beta 3 antibody [JM2E5] (FITC)	Ms mAb	Hu,Bov,Dog,Pig,Hrs	ICC/IF, FACS	
	  GTX100565	Integrin alpha 6 antibody [N3C2], Internal	Rb pAb	Hu,Ms,Rat	WB, ICC/IF	
  GTX100789	Integrin alpha V antibody [C2C3], C-term	Rb pAb	Hu,Ms	WB, IHC-P, ELISA		
Intracellular Trafficking	  GTX638119	Annexin A1 antibody [HL2141]	Rec Rb mAb	Hu,Ms,Rat	WB, IHC-P	
	    GTX101070	Annexin A1 antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP	
	 GTX115600	Annexin A10 antibody [N1C1]	Rb pAb	Hu	WB, IHC-P	
		GTX100048	Annexin A13 antibody [N1], N-term	Rb pAb	Hu	WB, ICC/IF, IHC-P
	  GTX101902	Annexin II antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P	
	 GTX103330	Annexin III antibody	Rb pAb	Hu,Rat	WB, IHC-P	
	 GTX103249	Annexin IV antibody	Rb pAb	Hu	WB, ICC/IF, IHC-P, IP	
	  GTX103250	Annexin V antibody	Rb pAb	Hu,Ms,Rat	WB, FACS	
		GTX101604	Annexin VI antibody [C2C3], C-term	Rb pAb	Hu,Ms	WB, IHC-P
		GTX105298	Annexin VII antibody	Rb pAb	Hu	WB, ICC/IF, IHC-P
		GTX119471	Annexin VIII antibody [N2C3]	Rb pAb	Hu	WB, ICC/IF, IHC-P
	  GTX114255	Annexin XI antibody	Rb pAb	Hu	WB, IP	
	 GTX101454	Rab 1A antibody [N1C3]	Rb pAb	Hu,Ms,Rat	WB	
		GTX106337	RAB2A antibody [C2C3], C-term	Rb pAb	Hu	WB, IHC-P
	  GTX104380	RAB3B antibody [N1C3]	Rb pAb	Hu	WB	
	   GTX108610	RAB3C antibody [N1C3]	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P	
	  GTX108607	RAB4A antibody	Rb pAb	Hu,Ms	WB, IHC-P	
	 GTX636971	RAB5A antibody [HL1497]	Rec Rb mAb	Hu,Ms,Rat	WB, IHC-P	
	 GTX109665	RAB5A antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP	
	  GTX635981	RAB6A antibody [HL1047]	Rec Rb mAb	Hu,Ms,Rat,Zfsh	WB, ICC/IF, IHC-P	
  GTX132548	RAB7A antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P		

	Cat. No.	Product Name	Clonality	Reactivity	Applications
Intracellular Trafficking	GTX119095	RAB11B antibody [N1C3]	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IHC-Fr
	 GTX131055	RAB18 antibody	Rb pAb	Hu	WB
	  GTX119559	RAB20 antibody [N1C3]	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
	  GTX118872	RAB26 antibody [N2C3-2]	Rb pAb	Hu,Rat	WB, ICC/IF, IHC-P
	   GTX109180	RAB27A antibody [N1C3]	Rb pAb	Hu	WB, IHC-P
	 GTX130477	RAB32 antibody	Rb pAb	Hu	WB, ICC/IF, IP
	 GTX116390	RAB33B antibody [N2C3]	Rb pAb	Hu,Ms	WB, IHC-P
SNARE Complex	GTX120294	RAB35 antibody [N1C3]	Rb pAb	Hu,Ms,Rat,Hm	WB, ICC/IF, IHC-P
	GTX117823	SNAP23 antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	 GTX113839	SNAP25 antibody	Rb pAb	Hu,Ms,Rat,Zfsh	WB, ICC/IF, IHC-P, IHC-Fr, IHC-Wm
	GTX131028	SNAP29 antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF
	 GTX637255	SNAP91 antibody [HL1657]	Rec Rb mAb	Hu,Ms,Rat	WB, IHC-P
	GTX102127	VAMP1 antibody	Rb pAb	Hu,Ms	WB, IHC-P
	 GTX634812	VAMP2 antibody [GT6311]	Ms mAb	Ms,Rat	WB, ICC/IF, IHC-P
Biogenesis Factors	 GTX133241	VAMP2 antibody	Rb pAb	Ms,Rat	WB, ICC/IF, IHC-P, IHC-Fr
	  GTX132181	VAMP8 antibody	Rb pAb	Hu,Rat	WB
	GTX135282	ALIX antibody	Rb pAb	Hu	WB, IHC-P
	GTX132976	Clathrin Heavy chain antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF
	 GTX634154	Syntenin 1 antibody [GT1523]	Ms mAb	Hu,Rat	WB, ICC/IF
	  GTX108391	Syntenin 1 antibody [N1], N-term	Rb pAb	Hu,Ms,Zfsh	WB, ICC/IF, IHC-P, IP, ELISA
	GTX117949	Syntenin 2 antibody [N2C3]	Rb pAb	Hu	WB
	   GTX630148	Ubiquitin antibody [GT7811]	Ms mAb	Hu,Ms,Rat	WB, IHC-P
	  GTX128826	Ubiquitin antibody	Rb pAb	Hu,Ms,Rat	WB
	GTX115852	VPS4A antibody [N3C3]	Rb pAb	Hu	WB
	 GTX115249	VPS4B antibody [N3C3]	Rb pAb	Hu	WB, ICC/IF, IHC-P
	GTX107706	VPS11 antibody	Rb pAb	Hu	WB, ICC/IF, IHC-P
	GTX107716	VPS16 antibody	Rb pAb	Hu	WB, IHC-P
	GTX130176	VPS18 antibody	Rb pAb	Hu	WB, ICC/IF
	  GTX106297	VPS26 antibody [C2C3], C-term	Rb pAb	Hu	WB, ICC/IF, IHC-P
	GTX116189	VPS29 antibody	Rb pAb	Hu	WB, IHC-P
	  GTX119416	VPS33A antibody [C1C3]	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
	   GTX129528	VPS34 antibody	Rb pAb	Hu	WB, IP
	  GTX635821	VPS35 antibody [HL1017]	Rec Rb mAb	Hu,Ms,Rat,Zfsh,Cat,Dog	WB, ICC/IF, IHC-P, IP
	  GTX108058	VPS35 antibody [C3], C-term	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP
GTX102152	VPS72 antibody [N1C1]	Rb pAb	Hu	WB	
 GTX107286	VTA1 antibody	Rb pAb	Hu	WB, ICC/IF, IHC-P	
ESCRT-0	 GTX637378	HGS antibody [HL1730]	Rec Rb mAb	Hu,Cat,Dog	WB, ICC/IF, IHC-P
	  GTX101718	HGS antibody [C2C3], C-term	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	 GTX115060	STAM antibody [N2C2], Internal	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
	GTX115382	STAM2 antibody [N1N3]	Rb pAb	Hu	WB
ESCRT-I	   GTX635396	TSG101 antibody [4A10-RB]	Rec Rb mAb	Hu	WB, ICC/IF
	    GTX70255	TSG101 antibody [4A10]	Rec Ms mAb	Hu,Ms,Rat,Zfsh,Dog,Hm,Pig,Mk	WB, ICC/IF, IHC-P, FACS, IP, ELISA, EM, IHC, IHC (Free Floating)
	  GTX118736	TSG101 antibody	Rb pAb	Hu,Ms	WB, IHC-P, IP, ELISA, Sandwich ELISA
	GTX115937	VPS28 antibody	Rb pAb	Hu	WB, ICC/IF, IHC-P
ESCRT-II	GTX108053	VPS37C antibody [N1], N-term	Rb pAb	Hu	WB, ICC/IF
	GTX116124	VPS36 antibody	Rb pAb	Hu,Ms	WB, IHC-P
ESCRT-III	  GTX118181	CHMP2B antibody	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P
	  GTX106692	CHMP5 antibody [N1C3]	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P, IP
	GTX116824	CHMP6 antibody [N1C3]	Rb pAb	Hu	WB
	 GTX101972	IST1 antibody	Rb pAb	Ms	WB

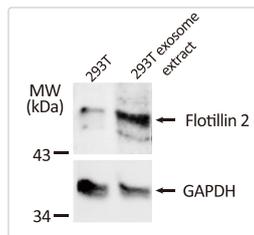
Selected Products



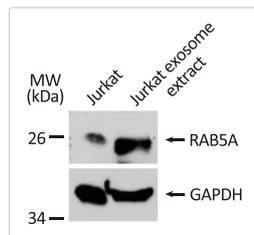
CHMP2B antibody
(GTX118181) 



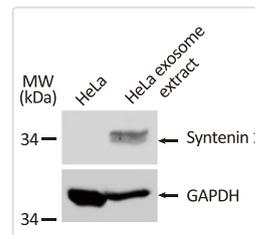
CHMP5 antibody [N1C3]
(GTX106692)  



Flotillin 2 antibody [C3],
C-term (GTX100279) 



RAB5A antibody
(GTX109665) 



Syntenin 1 antibody [N1],
N-term (GTX108391)  

	Cat. No.	Product Name	Clonality	Reactivity	Applications
Enzymes	 GTX630506	ENO1 antibody [GT186]	Ms mAb	Hu,Rat	WB
	  GTX101803	ENO1 antibody [N3C3]	Rb pAb	Hu,Ms,Rat,Zfsh	WB, ICC/IF, IHC-P, IHC-Wm, Dot
	 GTX637966	GAPDH antibody [HL2062]	Rec Rb mAb	Hu,Ms,Rat,Zfsh,Cat,Dog	WB
	  GTX627408	GAPDH antibody [GT239]	Ms mAb	Hu,Ms,Rat,Zfsh,Yeast,Dm, Dog,Pig,Mk,C. albicans,E. coli	WB, ICC/IF, IHC-P, EMSA
	  GTX100118	GAPDH antibody	Rb pAb	Hu,Ms,Rat,Zfsh,Yeast,Rb,Dm, Bov,Dog,Hm,Chk,Pig,Mk, C. elegans,E. coli,Mosq, Nematode,Pika,Plant,Fish, Bacteria,Insect,milkfish	WB, ICC/IF, IHC-P, IP
	  GTX107546	Pyruvate Kinase (liver/RBC) antibody	Rb pAb	Hu,Ms,Rat	WB
Chaperones	  GTX111536	Pyruvate Kinase (liver/RBC) antibody	Rb pAb	Hu,Rat	WB, ICC/IF, IHC-P
	  GTX637059	Hsp70 antibody [HL1580]	Rec Rb mAb	Hu,Ms,Rat,Cat,Dog	WB, ICC/IF, IHC-P
	 GTX637301	Hsp70 antibody [HL1702]	Rec Rb mAb	Hu,Ms,Rat	WB
	  GTX111088	Hsp70 antibody	Rb pAb	Hu,Ms,Rat,Mk,C. elegans	WB, ICC/IF, IHC-P, IP
	 GTX112963	Hsp70 antibody	Rb pAb	Hu,Ms,Rat,Zfsh	WB, ICC/IF, IHC-P, IHC-Wm
	   GTX109753	Hsp90 alpha antibody	Rb pAb	Hu,Ms,Rat,Dm,Mk,Nematode	WB, ICC/IF, IHC-P, IP
	  GTX101448	Hsp90 beta antibody	Rb pAb	Hu,Ms,Rat,Zfsh	WB, ICC/IF, IHC-P, IHC-Wm, IP, ELISA-Ag
	  GTX637403	beta Catenin antibody [HL1753]	Rec Rb mAb	Hu,Ms,Cat,Dog	WB, ICC/IF, IHC-P
Signal Transduction	  GTX632676	beta Catenin antibody [GT3171]	Ms mAb	Hu,Ms,Cat,Dog	WB, ICC/IF, IHC-P
	   GTX101435	beta Catenin antibody [N1N2-2], N-term	Rb pAb	Hu,Ms,Rat,Zfsh,Rb,Cat,Dog	WB, ICC/IF, IHC-P, IHC-Wm, FACS, IP, ChIP assay, IHC
	 GTX133736	14-3-3 antibody	Rb pAb	Hu,Ms	WB
	  GTX113296	14-3-3 beta antibody [N1C2]	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	 GTX109090	14-3-3 epsilon antibody [N1C3]	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P, IP
	 GTX113577	14-3-3 eta antibody [N1C3]	Rb pAb	Hu	WB
	  GTX113298	14-3-3 gamma antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IP
	  GTX100801	14-3-3 sigma antibody	Rb pAb	Hu,Ms	WB, ICC/IF, IHC-P, IP
	  GTX100289	14-3-3 sigma antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	 GTX102199	14-3-3 theta antibody	Rb pAb	Hu,Ms,Zfsh	WB, IHC-P
	 GTX101075	14-3-3 zeta antibody	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P
	Cell type-specific proteins	GTX112677	APP antibody	Rb pAb	Hu,Ms,Rat
 GTX101336		APP antibody [C2C3], C-term	Rb pAb	Hu,Ms,Rat	WB, ICC/IF, IHC-P, IHC-Fr
  GTX635160		beta Amyloid (1-42) antibody - Conformation Specific antibody [G1622]	Ms mAb	Hu,Ms	IHC-P, Dot, ELISA, Sandwich ELISA
   GTX134510		beta Amyloid (1-42) antibody - Conformation Specific	Rb pAb	Hu,Ms	IHC-P, Dot, ELISA, Sandwich ELISA
GTX129719		CXCR4 antibody	Rb pAb	Hu	WB
 GTX100644		Fas Ligand antibody [N2C1], Internal	Rb pAb	Hu	WB
GTX101063		Prion Protein (PrP) antibody	Rb pAb	Hu,Ms	WB, IHC-P
 GTX110441		TFR2 antibody [N3C2], Internal	Rb pAb	Hu	WB, IHC-P
GTX128098		Wnt2 antibody	Rb pAb	Ms	WB
GTX128099	Wnt2b antibody	Rb pAb	Hu	WB	