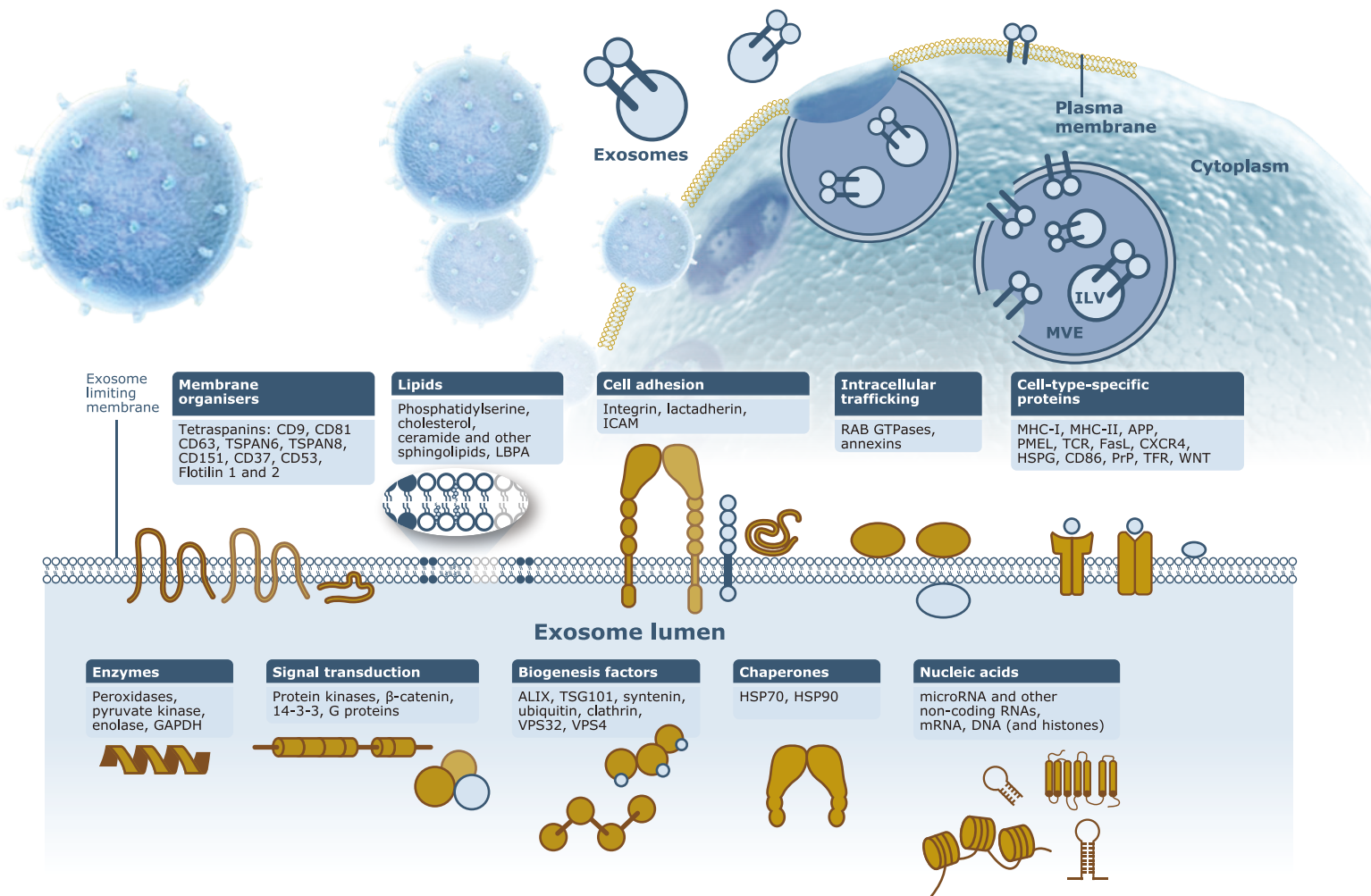


外泌體 Exosome 抗體選擇指南

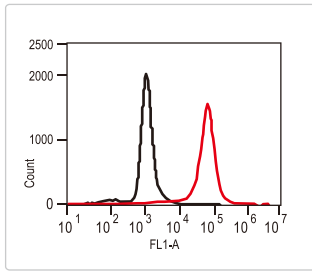
外泌體(exosome)是細胞外囊泡(extracellular vesicles)的一種，外泌體(exosome)大小(約30-150奈米)，其脂質雙層膜囊泡內攜帶核酸、蛋白質、醣類、脂質等多種訊號因子，作為細胞間信號傳遞的媒介以調控生理與病理機制，使其成為疾病診斷與治療研究發展受到矚目。

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。

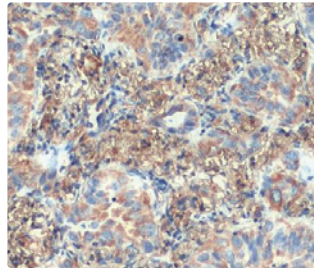
根據國際細胞外囊泡學會(ISEV)在2014年的提議，外泌體鑑定3個主要方法：穿透式電子顯微鏡(transmission electron microscope, TEM)、粒徑分析(Nanoparticle Tracking Analysis, NTA)、蛋白標記(Western Blot, WB)，而選擇正確且優良的外泌體(exosome)抗體正是最有效率的研究工具。




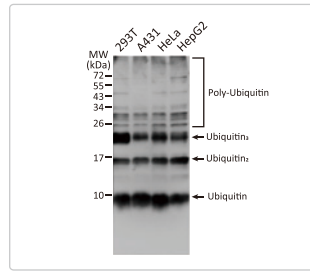
Selected Products



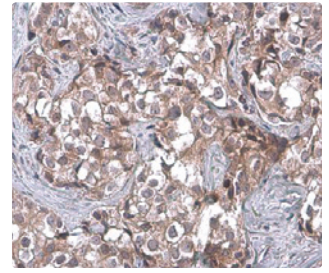
CD81 antibody
(GTX101766)    
































































VPS35 antibody [HL1017]
(GTX635821)  




























































Ubiquitin antibody [GT7811]
(GTX630148)    

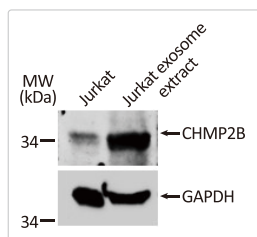



TSG101 antibody [4A10]
(GTX70255)    

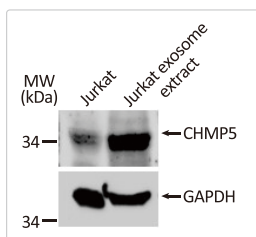
| | Cat. No. | Product Name | Clonality | Reactivity | Applications | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|------------------------------------|--------------------|------------------------------------|-------------------|
| 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 |
|  GTX133241 | VAMP2 antibody | Rb pAb | Ms,Rat | WB, ICC/IF, IHC-P, IHC-Fr | |
|   GTX132181 | VAMP8 antibody | Rb pAb | Hu,Rat | WB | |
| Biogenesis Factors | 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 |
| GTX108053 | VPS37C antibody [N1], N-term | Rb pAb | Hu | WB, ICC/IF | |
| ESCRT-II | 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 |

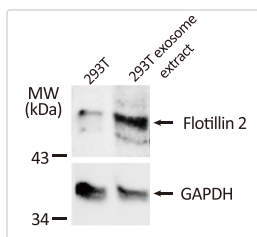
Selected Products




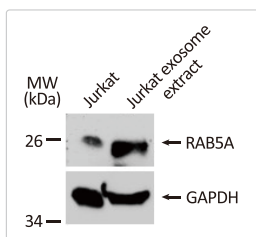
CHMP2B antibody
(GTX118181) 




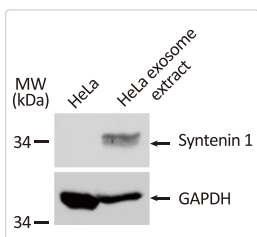
CHMP5 antibody [N1C3]
(GTX106692)  





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 | WB, ICC/IF, IHC-P, ELISA |
| |  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 | |