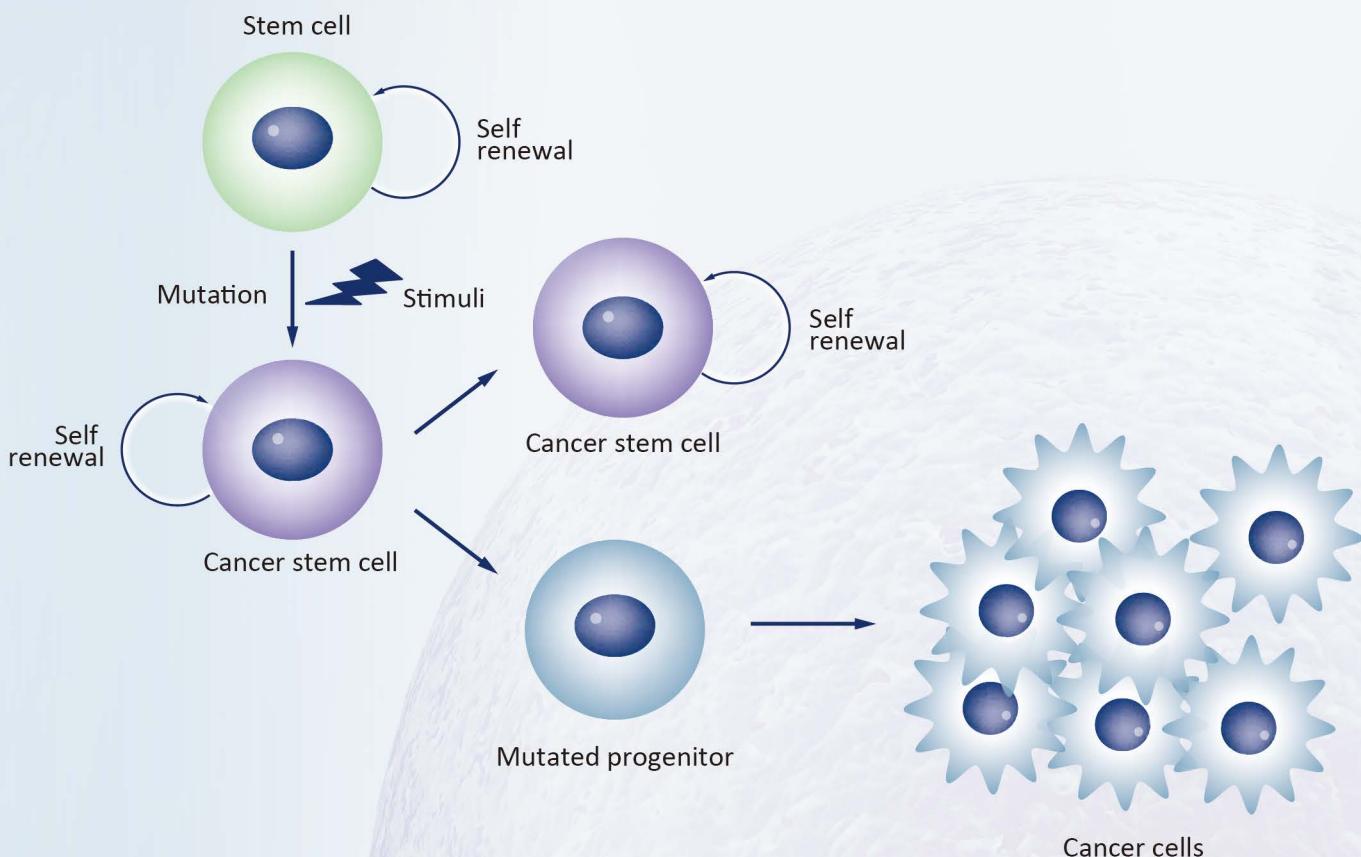


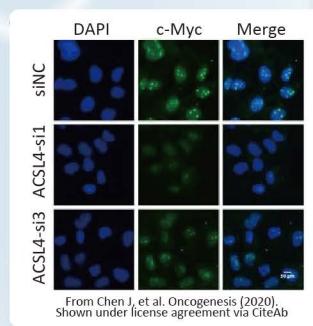
Cancer Stem Cells

www.genetex.com


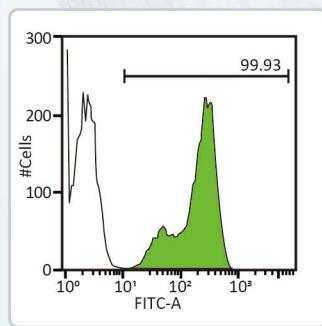
Cancer stem cells (CSCs) are increasingly being recognized as the key determinative cells of malignancies. CSCs are described as relatively quiescent cells capable of self-renewal and the generation of more differentiated daughter cells that constitute the bulk of the tumor mass. While there is still debate as to the existence of a single subset of CSCs versus a collection of CSC variants in some tumors, a growing body of literature links CSCs to all steps of tumorigenesis, from initiation to metastasis. Even more ominously, however, evidence suggests that these cells are responsible for therapeutic resistance and relapse, with their persistence often meaning a poor clinical prognosis. For these reasons, CSC biology has become a vigorously studied area of cancer research.

Stemness-Related Transcription Factors

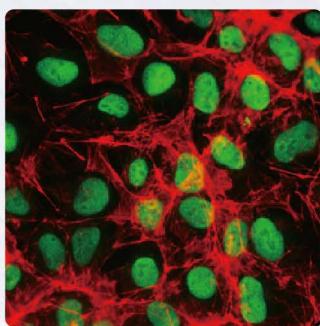
 Citation Support  KO/KD Validation  Comparable Abs
 Orthogonal Validation  Protein Overexpression



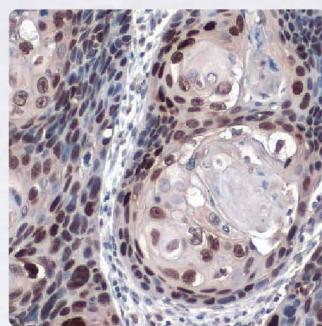
c-Myc antibody (GTx103436)
    



Nanog antibody [GT3312]
 (GTx627421)  



Oct4 antibody [GT486]
 (GTx627419)   



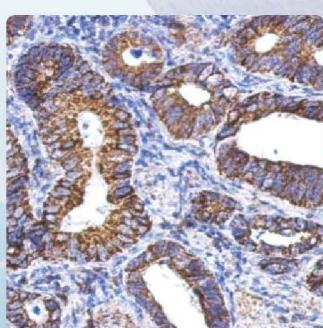
| Colon | Head & Neck | Leukemia | Breast | Liver | Brain | Lung | Multiple Myeloma | Prostate | Pancreatic |
|--|--|--|---|---|---|---|--------------------|---|---|
| CD133 ⁺ CD44 ⁺ CD166 ⁺ EpCAM ⁺ CD24 ⁺ CXCR4 ⁺ CK20 ⁺ CEA ⁺ LGR5 ⁺ | CD44 ⁺ ALDH ⁺ YAP1 ⁺ BMI1 ⁺ | CD34 ⁺ CD38 ⁻ HLA ^{-DR} CD71 ⁻ CD90 ⁻ CD117 ⁻ CD123 ⁺ | ESA ⁺ CD44 ⁺ CD24 ^{-/low} Lineage ⁻ ALDH1 ^{high} | CD133 ⁺ CD49f ⁺ CD90 ⁺ | CD133 ⁺ BCRP1 ⁺ A2B5 ⁺ SSEA1 ⁺ | CD133 ⁺ ABCG2 ^{high} | CD138 ⁻ | CD44 ⁺ α 2 β 1 ^{high} CD133 ⁺ | CD133 ⁺ CD44 ⁺ EpCAM ⁺ CD24 ⁺ ABCG2 ^{high} |

Stemness-Related Transcription Factors

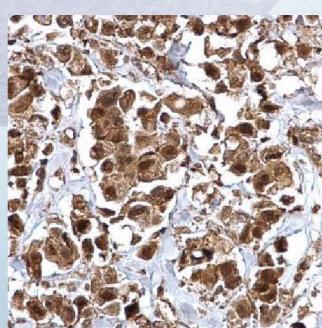
| Cat. No. | Product Name | Clonality | Reactivity | Applications |
|-----------|---------------------------------|-----------|----------------------------|---|
| GTX628459 | c-Myc antibody [GT168] | Ms mAb | Hu | WB, IHC-P, FACS, IP |
| GTX103436 | c-Myc antibody | Rb pAb | Hu, Ms, X. laevis | WB, ICC/IF, IHC-P, IHC-Fr, IP, ChIP assay |
| GTX101509 | KLF4 antibody | Rb pAb | Hu, Ms | WB, ICC/IF, IHC-P |
| GTX627421 | Nanog antibody [GT3312] | Ms mAb | Hu, Ms | WB, ICC/IF, FACS |
| GTX100863 | Nanog antibody [N3C3] | Rb pAb | Hu, Ms, C. simum | WB, ICC/IF, IHC-P, IHC-Fr, IP, ELISA, IHC, Sandwich ELISA |
| GTX627419 | Oct4 antibody [GT486] | Ms mAb | Hu, Ms | WB, ICC/IF, IHC-P, FACS, IP |
| GTX101497 | Oct4 antibody | Rb pAb | Hu, Ms, Rat | WB, ICC/IF, IHC-P, IHC-Fr, FACS, IP |
| GTX109983 | SALL4 antibody [C1C2], Internal | Rb pAb | Hu, Ms, Pig | WB, ICC/IF, IHC-P |
| GTX627404 | SOX2 antibody [GT1876] | Ms mAb | Hu, Ms, Rat, Zfsh | WB, ICC/IF, IHC-P, IHC-Fr, FACS, IP |
| GTX101507 | SOX2 antibody [N1C3] | Rb pAb | Hu, Ms, Rat, Frg, C. simum | WB, ICC/IF, IHC-P, IHC-Fr, FACS, IP |

Differentiated and Cell Type-Specific Markers

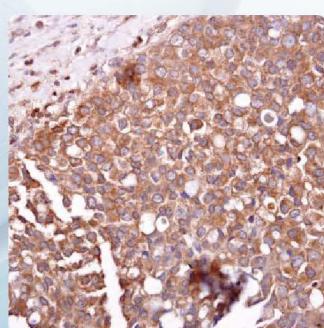
| Cat. No. | Product Name | Clonality | Reactivity | Applications |
|-----------|-----------------------------------|------------|------------------------|--------------------------------|
| GTX14538 | A2B5 antibody [105] | Ms mAb | Hu, Ms, Rat | ICC/IF |
| GTX03718 | ABCB5 antibody | Rb pAb | Hu, Ms, Rat | WB, ICC/IF, IHC-P, FACS, ELISA |
| GTX100437 | ABCG2 antibody | Rb pAb | Hu, Ms | WB, IHC-P |
| GTX123973 | ALDH1A1 antibody | Rb pAb | Hu, Ms, Rat, Zfsh, Cat | WB, ICC/IF, IHC-P, IHC-Wm |
| GTX115148 | ALDH1A2 antibody [C1C3] | Rb pAb | Hu, Ms, Rat, Zfsh | WB, IHC-P, IHC-Wm |
| GTX110784 | ALDH1A3 antibody [N2C2], Internal | Rb pAb | Hu, Ms, Rat | WB, ICC/IF, IHC-P |
| GTX107279 | ALDH1B1 antibody | Rb pAb | Hu, Ms | WB, ICC/IF, IHC-P |
| GTX131047 | ALDH1L1 antibody | Rb pAb | Hu, Ms, Rat | WB, IHC-Fr |
| GTX114008 | Bmi1 antibody | Rb pAb | Hu, Ms, Cat, Dog | WB, ICC/IF, IHC-P, IP |
| GTX102788 | CD13 antibody | Rb pAb | Hu | WB, IHC-P |
| GTX101512 | CD19 antibody [C1C3] | Rb pAb | Hu, Ms | WB, ICC/IF, IHC-P, FACS |
| GTX628420 | CD20 antibody [GT0008] | Ms mAb | Hu | FACS |
| GTX100209 | CD20 antibody [C2C3], C-term | Rb pAb | Hu, Cat, Dog | WB, ICC/IF, IHC-P |
| GTX37755 | CD24 antibody | Rb pAb | Hu, Rat | WB, IHC-P |
| GTX135137 | CD26 antibody | Rb pAb | Hu | WB |
| GTX104406 | CD27 antibody | Rb pAb | Hu | WB, IHC-P |
| GTX637644 | CD34 antibody [HL1895] | Rec Rb mAb | Hu | FACS |
| GTX111632 | CD34 antibody [N2C3] | Rb pAb | Hu | WB, IHC-Fr |



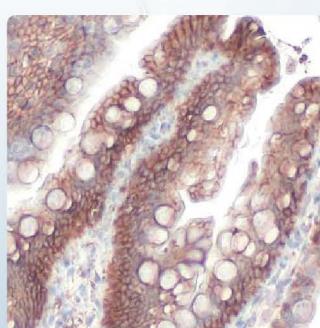
ALDH1A1 antibody (GTX123973)



Bmi1 antibody (GTX114008)



ABCG2 antibody (GTX100437)

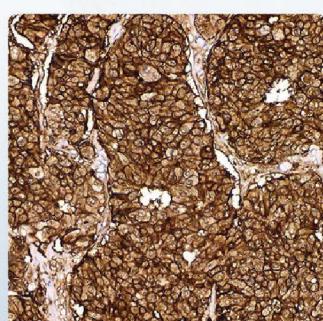


EpCAM antibody [HL1339] (GTX636759)

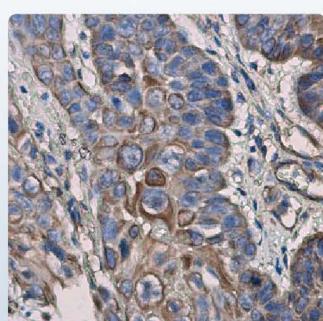
| Cat. No. | Product Name | Clonality | Reactivity | Applications |
|-----------|--|------------|---------------|------------------------------------|
| GTX132579 | CD38 antibody | Rb pAb | Hu | WB |
| GTX637231 |   CD44 antibody [HL1650] | Rec Rb mAb | Hu,Cat,Dog | WB, ICC/IF, IHC-P |
| GTX628895 |    CD44 antibody [GT462] | Ms mAb | Hu | WB, IHC-P, FACS, IP |
| GTX102111 |    CD44 antibody | Rb pAb | Hu,Rat,Rb | WB, ICC/IF, IHC-P, IHC-Fr, IP, LCI |
| GTX628417 | CD45 antibody [GT0005] | Ms mAb | Hu | FACS |
| GTX116018 |   CD45 antibody | Rb pAb | Hu,Ms,Rat,Rb | WB, ICC/IF, IHC-P, FACS |
| GTX132762 | CD47 antibody | Rb pAb | Hu | WB |
| GTX108732 |  CD66e antibody | Rb pAb | Hu | WB, ICC/IF, IHC-P |
| GTX102596 |    CD71 antibody [N2C1], Internal | Rb pAb | Hu,Ms | WB, ICC/IF |
| GTX637416 |  CD90 antibody [HL1766] | Rec Rb mAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P |
| GTX130072 |  CD90 antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, IHC-Fr |
| GTX34223 | CD96 antibody | Rb pAb | Hu | WB |
| GTX100508 | CD105 antibody [N3C3] | Rb pAb | Hu,Ms | WB, IHC-P |
| GTX636673 |   CD133 antibody [HL1271] | Rec Rb mAb | Hu,Ms,Rat | WB, IHC-P |
| GTX637124 |  CD133 antibody [HL1631] | Rec Rb mAb | Hu | FACS |
| GTX100567 |   CD133 antibody [C1C2], Internal | Rb pAb | Hu | WB, ICC/IF, IHC-P, FACS |
| GTX42394 |  CD151 antibody [11G5a] | Ms mAb | Hu | WB, IHC-P, IHC-Fr, FACS, IP, ELISA |
| GTX130098 | CD166 antibody | Rb pAb | Hu,Ms,Rat | WB, IHC-P |
| GTX15677 | CEA antibody [1106] | Ms mAb | Hu | WB, ICC/IF, FACS, IP, ELISA, RIA |
| GTX81335 | c-Kit antibody, N-term | Rb pAb | Hu,Ms | WB, IHC-P, FACS |
| GTX631992 |   c-Met antibody [GT556] | Ms mAb | Hu | WB, IHC-P, FACS, IP |
| GTX100637 |   c-Met antibody [C3], C-term | Rb pAb | Hu | WB, ICC/IF, IP |
| GTX100389 |   CXCR1 antibody [C2C3], C-term | Rb pAb | Hu,Ms | ICC/IF, IHC-P, IHC-Fr |
| GTX129719 | CXCR4 antibody | Rb pAb | Hu | WB |
| GTX110600 |   Cytokeratin 20 antibody [N2C2], Internal | Rb pAb | Hu,Ms | WB, ICC/IF, IHC-P |
| GTX636759 |   EpCAM antibody [HL1339] | Rec Rb mAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, FACS |
| GTX635967 |  EpCAM antibody [GT25512] | Ms mAb | Hu | WB, ICC/IF, IHC-P, FACS |
| GTX113459 |  HLA-DR antibody [N2C3] | Rb pAb | Hu | WB, IHC-P |
| GTX637305 |   hnRNP A2B1 antibody [HL1706] | Rec Rb mAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P |
| GTX127928 |   hnRNP A2B1 antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, IP |
| GTX100450 |   ICAM1 / CD54 antibody [N1C2] | Rb pAb | Hu,Rat | WB, IHC-P |
| GTX101563 |   IL3 Receptor alpha antibody [N2C2], Internal | Rb pAb | Hu | WB, IHC-P |
| GTX35237 |   Integrin alpha 2 antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P |
| GTX100565 |   Integrin alpha 6 antibody [N3C2], Internal | Rb pAb | Hu,Ms,Rat | WB, ICC/IF |
| 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 |
| GTX02823 |   Integrin beta 3 antibody [GT1226] | Rec Rb mAb | Hu,Ms,Rat | WB, IHC-P |
| GTX130204 |  LGR5 antibody | Rb pAb | Hu,Ms | WB, ICC/IF, IHC-P |
| GTX101540 |  Musashi 1 antibody [N3C3] | Rb pAb | Hu,Ms | WB, ICC/IF, IHC-Fr, IP |
| GTX630201 |   Nestin antibody [GT623] | Ms mAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, IHC-Fr |
| GTX102262 |   p75 NGF Receptor / CD271 antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, IHC-Fr, FACS |
| GTX60783 | Rex1 antibody [5E11A6] | Ms mAb | Hu,Ms | WB, IHC-P, FACS, ELISA |
| GTX48035 |  SSEA-1 / CD15 antibody [MC-480] | Ms mAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, IHC-Fr, FACS |
| GTX54537 | Syndecan-1 / CD138 antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, ELISA |
| GTX65883 | TIM-3 antibody | Rb pAb | Hu,Ms | WB, ICC/IF |
| GTX637643 |   YAP1 antibody [HL1894] | Rec Rb mAb | Hu | WB, ICC/IF, IHC-P |
| GTX129151 |    YAP1 antibody | Rb pAb | Hu,Ms,Deer | WB, ICC/IF, IHC-P, IHC-Fr, IP |



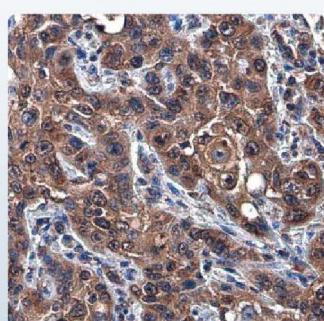
Mouse colon
Mouse intestine
CD133 antibody [HL1271]
(GTX636673)   



CD44 antibody [GT462]
(GTX628895)   



IL3 Receptor alpha antibody [N2C2], Internal (GTX101563)  



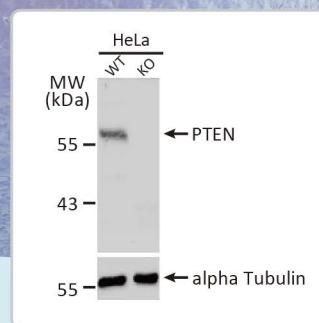
c-Met antibody [GT556]
(GTX631992)  

CSC Signaling Pathways

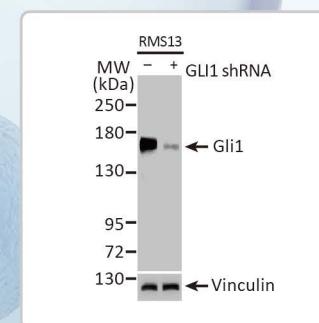
| Cat. No. | Product Name | Clonality | Reactivity | Applications |
|-----------|---|------------|-------------------------------|--|
| GTX121937 | AKT antibody [N3C2], Internal | Rb pAb | Hu,Ms,Rat,Pig,Japanese Medaka | WB, ICC/IF, IHC-P, IHC-Fr, IP |
| GTX128414 | AKT (phospho Ser473) antibody | Rb pAb | Hu,Ms,Rat,Pig | WB, ICC/IF, IHC-P, IP |
| GTX636413 | AKT1 antibody [HL1142] | Rec Rb mAb | Hu,Rat,Cat,Dog | WB, ICC/IF, IHC-P |
| GTX110613 | AKT1 antibody | Rb pAb | Hu,Ms | WB, IHC-P, IP |
| GTX111612 | AKT2 antibody | Rb pAb | Hu | WB, ICC/IF, IHC-P |
| GTX113312 | AKT3 antibody | Rb pAb | Hu,Ms | WB, ICC/IF, IHC-P |
| GTX637403 | beta Catenin antibody [HL1753] | Rec Rb 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 |
| GTX635619 | Gli1 antibody [HL247] | Rec Rb mAb | Hu,Ms,Rat | WB, IHC-P |
| GTX106207 | Gli1 antibody | Rb pAb | Hu,Ms | WB, ICC/IF, IHC-P, IP |
| GTX124274 | Gli1 antibody | Rb pAb | Hu,Ms | WB, ICC/IF, ChIP-seq |
| GTX57670 | JAK2 antibody [AT53B7] | Ms mAb | Hu | WB, ICC/IF, FACS |
| GTX132784 | JAK2 (phospho Tyr1007/1008) antibody | Rb pAb | Hu,Ms | WB |
| GTX102090 | NFkB p65 antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, IHC-Fr, IP, ChIP assay |
| GTX107678 | NFkB p65 antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, IP, EMSA |
| GTX637436 | NFkB p105 antibody [HL1784] | Rec Rb mAb | Hu | WB |
| GTX110585 | NFkB p105 antibody | Rb pAb | Hu,Ms,Dog | WB, ICC/IF, IHC-P, ChIP assay, IHC |
| GTX101593 | NOTCH2 antibody [C2], C-term | Rb pAb | Hu,Ms | WB, ChIP assay, ChIP-seq |
| GTX107779 | PI3 kinase p55 gamma antibody | Rb pAb | Hu,Rat | WB, IHC-P |
| GTX636838 | PI3 kinase p85 alpha antibody [HL1398] | Rec Rb mAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P |
| GTX111068 | PI3 kinase p85 alpha antibody [N2C1], Internal | Rb pAb | Hu,Ms,Rat | WB, IHC-P, IP |
| GTX132597 | PI3 kinase p85 (phospho Tyr467)/p55 (phospho Tyr199) antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF |
| GTX132466 | PI3 kinase p150 antibody | Rb pAb | Hu,Ms | WB, IHC-P, IP |
| GTX101025 | PTEN antibody | Rb pAb | Hu,Ms,Rat,Cat,Dog,Pig | WB, ICC/IF, IHC-P |
| GTX130418 | PTEN (phospho Thr366/Ser370) antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF |
| GTX103117 | STAT2 antibody [C2C3], C-term | Rb pAb | Hu,Ms | WB, IHC-P, IP |
| GTX133945 | STAT2 (phospho Tyr690) antibody | Rb pAb | Hu | WB |
| GTX636400 | STAT3 antibody [HL1134] | Rec Rb mAb | Hu,Ms,Rat,Cat,Dog | WB, IHC-P |
| GTX108630 | STAT3 antibody | Rb pAb | Hu,Zfsh | WB, FACS, IP |
| GTX104616 | STAT3 antibody [C3], C-term | Rb pAb | Hu,Ms,Rat,Plant | WB, ICC/IF, IHC-P |
| GTX636938 | STAT3 (phospho Tyr705) antibody [HL1464] | Rec Rb mAb | Hu,Rat | WB |
| GTX118000 | STAT3 (phospho Tyr705) antibody | Rb pAb | Hu,Ms,Zfsh | WB, ICC/IF, IHC-P, FACS |
| GTX113273 | STAT6 antibody | Rb pAb | Hu,Ms | WB, ICC/IF, IHC-P, IP |
| GTX105955 | Wnt1 antibody | Rb pAb | Hu,Ms,Rat | WB |
| GTX128101 | Wnt3a antibody | Rb pAb | Hu,Rat | WB, IHC-P |
| GTX101085 | Wnt4 antibody | Rb pAb | Hu,Ms,Rat | WB, IHC-P |
| GTX111187 | Wnt5a antibody | Rb pAb | Hu,Ms,Rat | WB, IHC-P |
| GTX105680 | Wnt7a antibody | Rb pAb | Hu,Ms | WB, IHC-P |
| GTX128107 | Wnt7b antibody | Rb pAb | Hu | WB, ICC/IF |
| GTX637123 | Wnt11 antibody [HL1630] | Rec Rb mAb | Hu | WB |
| GTX105971 | Wnt11 antibody | Rb pAb | Hu,Ms,Rat | WB, ICC/IF, IHC-P, IHC |
| GTX636972 | Wnt16 antibody [HL1498] | Rec Rb mAb | Hu,Ms | WB, ICC/IF, IHC-P |



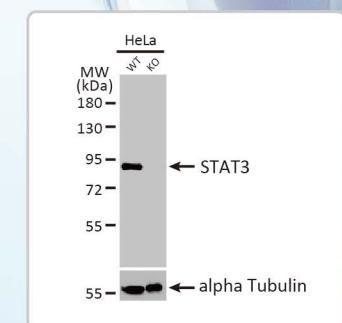
beta Catenin antibody [HL1753] (GTX637403)



PTEN antibody (GTX101025)



Gli1 antibody [HL247] (GTX635619)



STAT3 antibody [HL1134] (GTX636400)