**Supplemental Fig. s1.** Representative images showing the immunohistochemical staining of MAP and GFAP in the xenograft tumors at passage I (*arrow*). *Arrowheads* indicate the edge of tumor beyond which strong positivity of MAP in normal mouse brain and GFAP in reactive mouse astrocytes were observed.

**Supplemental Fig. s2.** Gene ontology analysis of the dysregulated signaling pathways that were present in patient tumor and xenografts (both passage I and passage III) compared to the normal pooled RNA samples.

**Supplemental Fig. 3.** Gene ontology analysis of the dysregulated pathways that were present in the xenografts (both passage I and passage III) compared to the patient tumor RNA sample.



## Supplemental Fig. s1

-log(pValue)



## Supplemental Fig. s2

-log(pValue)

0	1	2	3
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[1] Development\_EDG5 and EDG3 in cell proliferation and differentiation
[2] Immune response\_IL-6 signaling pathway
[3] Immune response\_Oncostatin M signaling via MAPK in mouse cells
[4] Immune response\_Oncostatin M signaling via MAPK in human cells
[5] Transcription\_Role of VDR in regulation of genes involved in osteoporosis
[6] Immune response\_Oncostatin M signaling via JAK-Stat in mouse cells
[7] Immune response\_Oncostatin M signaling via JAK-Stat in human cells
[8] Development\_Thrombopoetin signaling via JAK-STAT pathway
[9] Cytoskeleton remodeling\_Regulation of actin cytoskeleton by Rho GTPases
[10] G-protein signaling\_Ras family GTPases in kinase cascades (scheme)

## Supplemental Fig. s3