

Supplementary Table 1. Immunohistochemical antibodies used in this case

Marker	Clone/Catalog No.	Manufacturer	Dilution	Staining platform	Staining result	Positive control
S-100	ZA-0225	ZSGB-BIO, Beijing, China	Ready-to-use	LEICA	patchy positive, 40%	Normal peripheral nerve tissue
SOX10	RMA-0726	Maixin Biotech, Fuzhou, China	Ready-to-use	Roche VENTANA	Negative	Melanoma tissue or peripheral nerve tissue
GFAP	MAB-0769	Maixin Biotech, Fuzhou, China	Ready-to-use	Roche VENTANA	Negative	Brain/glial tissue
H3K27me3	RMA-0843	Maixin Biotech, Fuzhou, China	Ready-to-use	Roche VENTANA	Complete loss in tumor cells	Internal stromal, endothelial, and lymphoid cells

NKX2.2	RMA-0747	Maixin Biotech, Fuzhou, China	Ready-to-use	Roche VENTANA	Negative	Known NKX2.2-positive Ewing sarcoma/control tissue
FLI1	MAB-0649	Maixin Biotech, Fuzhou, China	Ready-to-use	Roche VENTANA	Negative	Vascular endothelial cells and/or known FLI1-positive control tissue
AE1/AE3	Kit-0009	Maixin Biotech, Fuzhou, China	Ready-to-use	LEICA	Negative	Carcinoma tissue
DOG1	Kit-0035	Maixin Biotech, Fuzhou, China	Ready-to-use	Roche VENTANA	Negative	GIST
CD117	Kit-0029	Maixin Biotech, Fuzhou, China	Ready-to-use	Roche VENTANA	Negative	GIST
Desmin	ZA-0610	ZSGB-BIO, Beijing, China	Ready-to-use	LEICA	Negative	Smooth muscle tissue
SMA	Kit-0006	Maixin Biotech, Fuzhou, China	Ready-to-use	LEICA	Negative	Smooth muscle tissue

