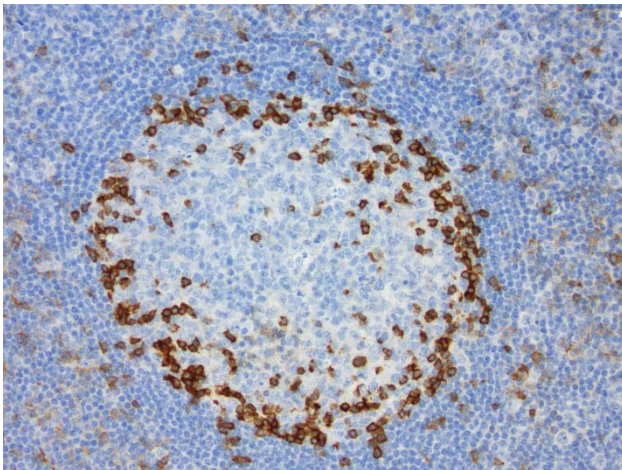


Image reference: <http://directorsblog.nih.gov/2015/06/09/a-surprising-match-cancer-immunotherapy-and-mismatch-repair/>

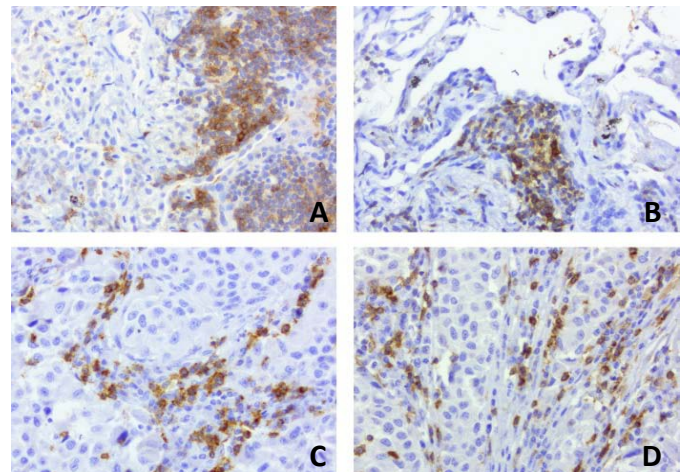
- PD-1 inhibits T-cell function upon binding to its ligands, PD-L1 and PD-L2, serving as a key checkpoint of the immune system.
- PD-1 and PD-L1 blocking mAbs have been demonstrated to improve the anti-tumor activities of T-cells in immunotherapy.



Immunohistochemical staining of FFPE human tonsil using anti-PD1 antibody UM800091 at 1:800. Briefly, FFPE tissues were deparaffinized then pretreated with HIER (ACCEL 3 in 1 EDTA Buffer pH8.7). Primary antibody was incubated 30 minutes at room temperature. Detection was achieved with 2-step anti-mouse HRP polymer (GBI-D22) and visualized with DAB chromogen.

PD-1 UltraMAB® Antibody

SKU#	UM800091
Clone Name	UMAB199
Target	Homo sapiens programmed cell death 1 (PD-1/PDCD1)
Host	Mouse
Reactivity	Human
Tested Application	WB, IHC, IF
Dilution	WB: 1:500, IHC: 1:800 to 1:1000, IF: 1:100



Immunohistochemical staining of FFPE 2 human lung carcinomas (A & B) and 2 human melanomas (C & D) using anti-PD1 antibody UM800091 at 1:800. Image shows tumor cells are negative for PD-1 while infiltrating lymphocytes showing strong positive PD-1 cells. IHC was done the same as tonsil panel on the left.

Antibodies against commonly studied proteins in Immuno-Oncology

Protein Name	Antibody Description	SKU
ARG1	ARG1 mouse monoclonal antibody, clone OTI4E6	TA502413
B7-1/CD80	CD80 mouse monoclonal antibody, clone UMAB65	UM500055
B7-H3/CD276	Rabbit Polyclonal CD276 Antibody	TA590443
B7-H4/VTCN1	Anti-VTCN1 mouse monoclonal antibody	TA318347
BTLA	BTLA mouse monoclonal antibody, clone UMAB61	UM500052
CD160	Rabbit Polyclonal Anti-CD160 Antibody	TA349762
CD19	CD19 mouse monoclonal antibody, clone UMAB103	UM500071
CD244	Rabbit Polyclonal Anti-CD244 Antibody	TA349773
IDO1	IDO1 mouse monoclonal antibody, clone UMAB126	UM500091
IL-10RA	IL10RA mouse monoclonal antibody, clone OTI1D10	TA506929
IL-13	IL13 mouse monoclonal antibody, clone OTI6D3	TA804004
IL-4	Rabbit polyclonal IL4 Antibody (C-term)	TA324803
LAG3	LAG3 mouse monoclonal antibody, clone OTI8F6	TA807082
MICA	Rabbit Polyclonal MICA Antibody	TA306443
MICB	anti MIC-B monoclonal antibody, cloneB-D55	AM31286AF-N
NCAM1	NCAM1/CD56 mouse monoclonal antibody, clone UMAB194	UM800086
Notch1	Anti-Notch1 mouse monoclonal antibody, clone OTI3E12	TA500078
PTGS1	Anti-PTGS1 Rabbit Polyclonal Antibody	TA321247
PD-L1	PD-L1/CD274 mouse monoclonal antibody, clone OTI13G7	TA809809
PD-L2	PDL2/PDCD1LG2 mouse monoclonal antibody, clone OTI5A7	TA808997
SOX2	Rabbit Polyclonal Antibody against SOX2 - Embryonic Stem Cell Marker	TA301462
TIM3	HAVCR2 mouse monoclonal antibody, clone OTI2E2	TA807034
Beta Tubulin	Rabbit polyclonal anti-TUBB(beta Tubulin) antibody, Loading control	TA301569
Vimentin	Vimentin (VIM) mouse monoclonal antibody, clone UMAB160	UM800055

For more antibodies, please visit
www.origene.com/products/antibodies