abbexa®

# Antibodies for Cancer Research

Abbexa is a supplier of biological tools, providing the scientific community with Primary Antibodies, Secondary Antibodies, Proteins and Peptides, ELISA kits and Enzymes as well as other kits and tools for use in research.

Working with various laboratories around the world, we aim to develop relevant, high quality, tested products for the biomedical research market.

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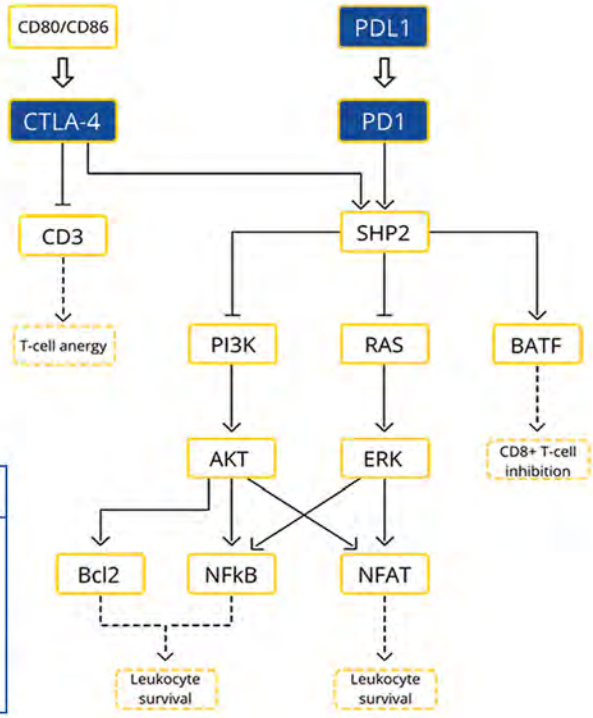
# CTLA-4

**CTLA4** is a **CD28 homologue**, a protein receptor that functions as an immune checkpoint by negatively regulating T-lymphocyte immune responses.

CD28 and CTLA4 compete for CD80 and CD86; CTLA4 has a higher binding affinity, and can therefore sequester the costimulatory CD28 secondary signal for T cell activation.

If CTLA-4 signalling is greater than CD28, T lymphocytes undergo anergy (resulting in reduced: IL-2 production, proliferation, and survival).




## abx104330

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC, IF/ICC
**Immunogen:** Gly52-Cys211

## abx104331

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Mouse
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC, IF/ICC
**Immunogen:** Val45-Ser185

## abx104332

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Rat
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC, IF/ICC
**Immunogen:** Thr41-Lys192

## abx172039

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Human
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** WB, IHC, IF/ICC
**Immunogen:** Gly52-Cys211

## abx117193

**Sizes:** 100µl
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB, IHC
**Immunogen:** A synthetic peptide of human CTLA4
**Isotype:** IgG

## abx414774

**Sizes:** 0.25mg, 0.1mg
**Reactivity:** Mouse
**Host:** Hamster
**Clonality:** Monoclonal
**Tested Applications:** ELISA, WB, IF/ICC, FCM, IP
**Immunogen:** Extracellular portion of mouse CD152 fused to a mouse IgG2a.
**Isotype:** IgG

## abx333777

**Sizes:** 20µg, 50µg, 100µg, 200µg, 1mg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, IF/ICC
**Immunogen:** 36-161 AA
**Isotype:** IgG2b Kappa

## abx139386

**Sizes:** 0.1 mg
**Reactivity:** Human
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** IHC-F, IF/ICC, FCM, IP
**Immunogen:** Human CD152-IgG heavy chain fusion protein.
**Isotype:** IgG2a

## abx335291

**Sizes:** 20µg, 50µg, 100µg, 200µg, 1mg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA
**Immunogen:** 36-161AA
**Isotype:** IgG
**Conjugation:** Biotin

## abx335290

**Sizes:** 20µg, 50µg, 100µg, 200µg, 1mg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Immunogen:** 36-161AA
Isotype: IgG
**Conjugation:** 290 - FITC

## abx335289

**Sizes:** 20µg, 50µg, 100µg, 200µg, 1mg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA
**Immunogen:** 36-161AA
Isotype: IgG
**Conjugation:** 289 - HRP

# PDL1, PD1

**PD-1/PD-L1** signalling pathway negatively regulates **immune responses**, preventing an autoimmune response against native cells in immune-privileged sites and mediating tumour immunity.

PD-1 is an immune checkpoint expressed on T lymphocytes. Ligands to PD-1 include: PD-L1 and PD-L2. PD-L1 expression on 'normal' tissues is a crucial mechanism of physiological peripheral immune tolerance to negatively regulate autoimmune responses. PD-L1 is expressed on cancer cells and helps tumours evade the immune system, creating an immunosuppressive environment.

If PD-1 is bound to PD-L1, it causes anergy of the lymphocyte, preventing T-cell mediated destruction of cells, including tumour cells.

## PDL1

### abx274655

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Human
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** WB, IHC, IF/ICC, IP
**Immunogen:** Pro24-Pro234
**Isotype:** IgG
**Conjugation:** Biotin

### abx130336, abx129655

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** 336 - Rat, 655 - Mouse
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC, IF/ICC, IP
**Immunogen:** Ser34-Val241

## PD1

### abx004272

**Sizes:** 20µl, 50µl, 100µl, 200µl
**Reactivity:** Human, Mouse
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB
**Immunogen:** 1-80 AA
**Isotype:** IgG

### abx128729

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC, IF/ICC
**Immunogen:** Leu41-Ala132

### abx174170

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Human
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** WB, IHC
**Immunogen:** Leu41-Ala132
Isotype: IgG2a Kappa

### abx306987, abx306986, abx306985

**Sizes:** 20µg, 50µg, 100µg, 200µg, 1mg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA
**Immunogen:** 21-170 AA
**Isotype:** IgG
**Conjugation:** 987 - Biotin, 986 - FITC, 985 - HRP

### abx114694

**Sizes:** 100µl
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB, IHC
**Immunogen:** Human PDCD1
**Isotype:** IgG

### abx318379

**Sizes:** 20µg, 50µg, 100µg, 200µg, 1mg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB, IHC, IF/ICC
**Immunogen:** 21-170AA
**Isotype:** IgG

### abx137435

**Sizes:** 5µg, 20µg, 100µg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Monoclonal
**Tested Applications:** ELISA, WB
**Immunogen:** 21-167 AA
**Isotype:** IgG2b

# PDL1, PD1

## abx140406

**Sizes:** 0.1mg
**Reactivity:** Human, Monkey
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** IHC-F, FCM
**Immunogen:** Full Length Human CD274
**Isotype:** IgG2b

## abx001385

**Sizes:** 20µl, 50µl, 100µl, 200µl
**Reactivity:** Human, Mouse, Rat
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC, IF/ICC
**Immunogen:**19-238 AA
**Isotype:** IgG

## abx236281

**Sizes:** 100µg
**Reactivity:** Human, Mouse, Pig
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** ELISA, WB, IHC, IF/ICC
**Immunogen:** PD-L1/CD274 fusion protein
**Isotype:** IgG1

## abx179111

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Rat
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** WB, IHC, IF/ICC, IP
**Immunogen:** Ser34-Val241
**Isotype:** IgG2a Kappa

## abx430491

**Sizes:** 200µl
**Reactivity:** Human
**Host:** Goat
**Clonality:** Polyclonal
**Tested Applications:** P-ELISA, WB, IF/ICC, FCM
**Immunogen:** C-Terminus: CKKQSDTHLEET
**Isotype:** IgG

## abx132278

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Human
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** WB, IHC, IF/ICC, IP
**Immunogen:** Pro24-Pro234

## abx104347

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC, IF/ICC, IP
**Immunogen:** Pro24-Pro234

## abx111472

**Sizes:** 100µl
**Reactivity:** Human, Mouse, Rat
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB, IHC
**Immunogen:** Human CD274
**Isotype:** IgG

## abx412030

**Sizes:** 0.1mg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC, IF/ICC
**Immunogen:** A peptide corresponding to a 17 amino acid sequence from near the centre of Human CD274.
**Isotype:** IgG

## abx140453, abx140427

**Sizes:** 100 tests
**Reactivity:** Human, Monkey
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** IHC, FCM, FUNC
**Immunogen:** Full length Human CD274
**Isotype:** IgG2b
**Conjugation:** 453 - APC, 427 - PE

## abx224294

**Sizes:** 100µl
**Reactivity:** Human
**Host:** Mouse
**Clonality:** Mouse
**Tested Applications:** ELISA, WB, FCM
**Immunogen:** 24-153 AA of human CD274

## abx320158

**Sizes:** 50µl, 100µl
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, IHC
**Immunogen:** 19-238 AA
**Isotype:** IgG

## abx430492

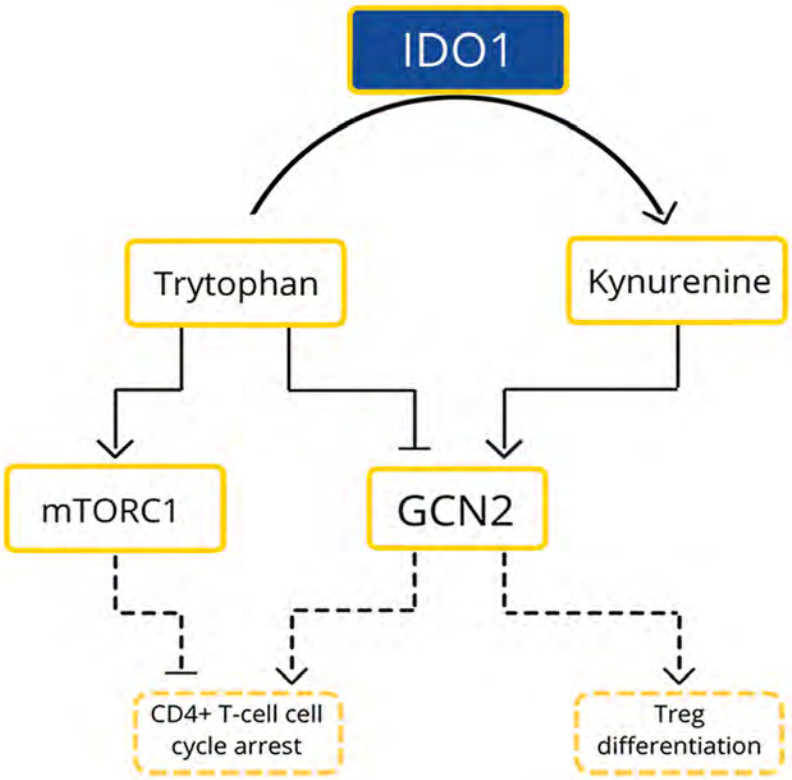
**Sizes:** 200µl
**Reactivity:** Human
**Host:** Goat
**Clonality:** Polyclonal
**Tested Applications:** P-ELISA, WB, IHC
**Immunogen:** C-Terminus CKKQSDTHLEET
**Isotype:** IgG
**Conjugation:** Biotin

# IDO1

**IDO1** is a **tryptophan catabolic enzyme**; it catalyses the conversion of tryptophan to kynurenine.

The increase in kynurenine (and subsequent depletion in tryptophan) has immunosuppressive effects, by activating T regulatory cells (Tregs) and myeloid-derived suppressor cells, which then inhibits the functions of effector T and natural killer cells.

Although this is a crucial mechanism in 'normal' immune cell functioning, cancer cells exploit this pathway (IDO1 is overexpressed in vast majority of cancers) to promote tumour progression, neovascularisation, and cancer immune evasion.




## abx234127

**Sizes:** 100µg
**Reactivity:** Human, Mouse, Rat
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB, IHC
**Immunogen:** Indoleamine 2,3-dioxygenase 1
**Isotype:** IgG

## abx415777

**Sizes:** 0.1mg
**Reactivity:** Human, Mouse
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** WB, IHC
**Immunogen:** Peptide corresponding to amino acids 78-184 of human IDO fused to GST.
**Isotype:** IgG3

## abx109906

**Sizes:** 20µg, 50µg, 100µg, 200µg, 1mg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB, IHC, IF/ICC
**Immunogen:** Recombinant human indoleamine 2.3-dioxygenase 1 protein (1-403 AA)
**Isotype:** IgG

## abx412567

**Sizes:** 0.1ml
**Reactivity:** Human, Monkey
**Host:** Sheep
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC
**Immunogen:** Recombinant human indoleamine 2.3-dioxygenase.
**Isotype:** IgG

## abx106970, abx105553, abx108391

**Sizes:** 20µg, 50µg, 100µg, 200µg, 1mg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA
**Immunogen:** Recombinant human indoleamine 2.3-dioxygenase 1 protein (1-403 AA)
**Isotype:** IgG
**Conjugation:** 553 - Biotin, 970 - FITC, 391 - HRP

## abx113123

**Sizes:** 100µl
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB
**Immunogen:** Human IDO1
**Isotype:** IgG

# TNFRSF4

The **OX40/OX40L** pathway promotes a **Th2 response**; this favours humoral B cell response, resulting in the production of large antibody quantities (which provide little support for immune responses against cancer cells).

The Th1 response is dampened due to the high levels of nearby IL4, causing a reduction in the numbers of macrophages and CD8+ T cells, cells which are more effective than B cells and granulocytes for clearing cancers.

## abx455390

**Sizes:** 50µg, 100µg
**Reactivity:** Mouse
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB, IHC
**Immunogen:** Recombinant Tumor Necrosis Factor Receptor Superfamily Member 4.
**Isotype:** IgG

## abx421527

**Sizes:** 50µg, 100µg
**Reactivity:** Mouse
**Host:** Rat
**Clonality:** Monoclonal
**Tested Applications:** FCM
**Immunogen:** N/A
**Isotype:** IgG1 Kappa

## abx339142

**Sizes:** 50µl, 100µl
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, IHC
**Immunogen:** Synthetic peptide of human TNFSF4.
**Isotype:** IgG

## abx026700

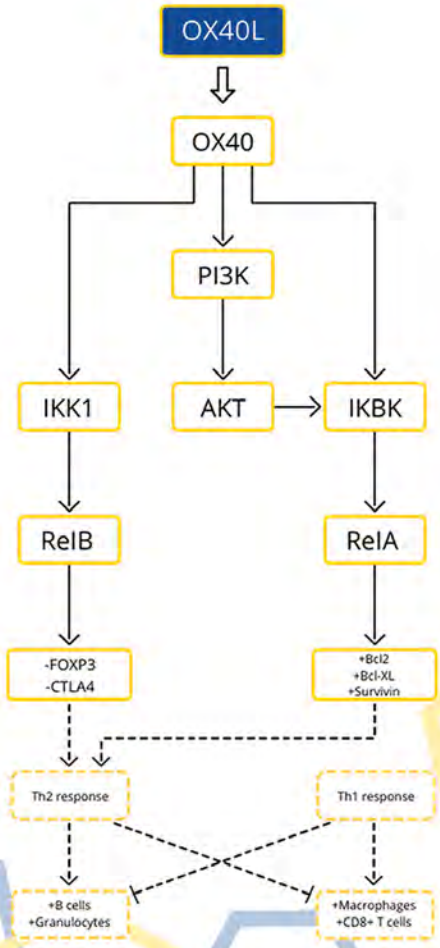
**Sizes:** 80µl, 400µl
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, WB
**Immunogen:** KLH-conjugated synthetic peptide between 102-131 amino acids from the Central region of human TNFSF4.
**Isotype:** IgG

## abx323445, abx323446, abx322832

**Sizes:** 50µg, 100µg
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** 445/446 - ELISA, WB, 832 - ELISA, IF/ICC
**Immunogen:** Synthesized peptide derived from the internal region of human OX40L.
**Isotype:** IgG

## abx025358

**Sizes:** 100µl
**Reactivity:** Human
**Host:** Mouse
**Clonality:** Monoclonal
**Tested Applications:** ELISA, WB
**Immunogen:** KLH-conjugated synthetic peptide between 97-125 amino acids from human TNFSF4.
**Isotype:** IgM

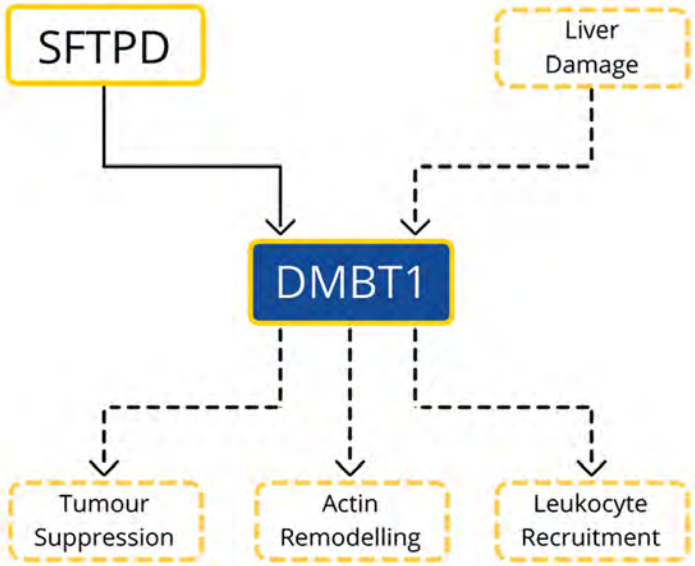


# DMBT1

**Deleted in Malignant Brain Tumours 1 protein** (DMBT1) is a putative tumour suppressor originally identified by its disappearance in a cell line derived from a brain tumour.

It is thought to interact with various different immune cells, recruiting them to nearby pathogens and to tumour cells.

The deletion of DMBT1 is typically mediated by the loss of the q end from chromosome 10 (q26.13 or above), which occurs in around 80% of glioblastoma multiforme cases.




## abx176133

**Sizes:** 100µl, 200µl, 1ml
**Reactivity:** Human
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** WB, IHC, IF/ICC
**Immunogen:** Cys2008-Arg2413

## abx376242

**Sizes:** 100µl
**Reactivity:** Human, Mouse, Rat
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** IHC
**Immunogen:** Synthesized peptide derived from part region of human protein

## abx213667

**Sizes:** 50µl, 100µl
**Reactivity:** Human, Mouse, Rat
**Host:** Rabbit
**Clonality:** Polyclonal
**Tested Applications:** ELISA, IHC
**Immunogen:** Synthetic Peptide of human DMBT1
**Isotype:** IgG

# PDL1, PD1

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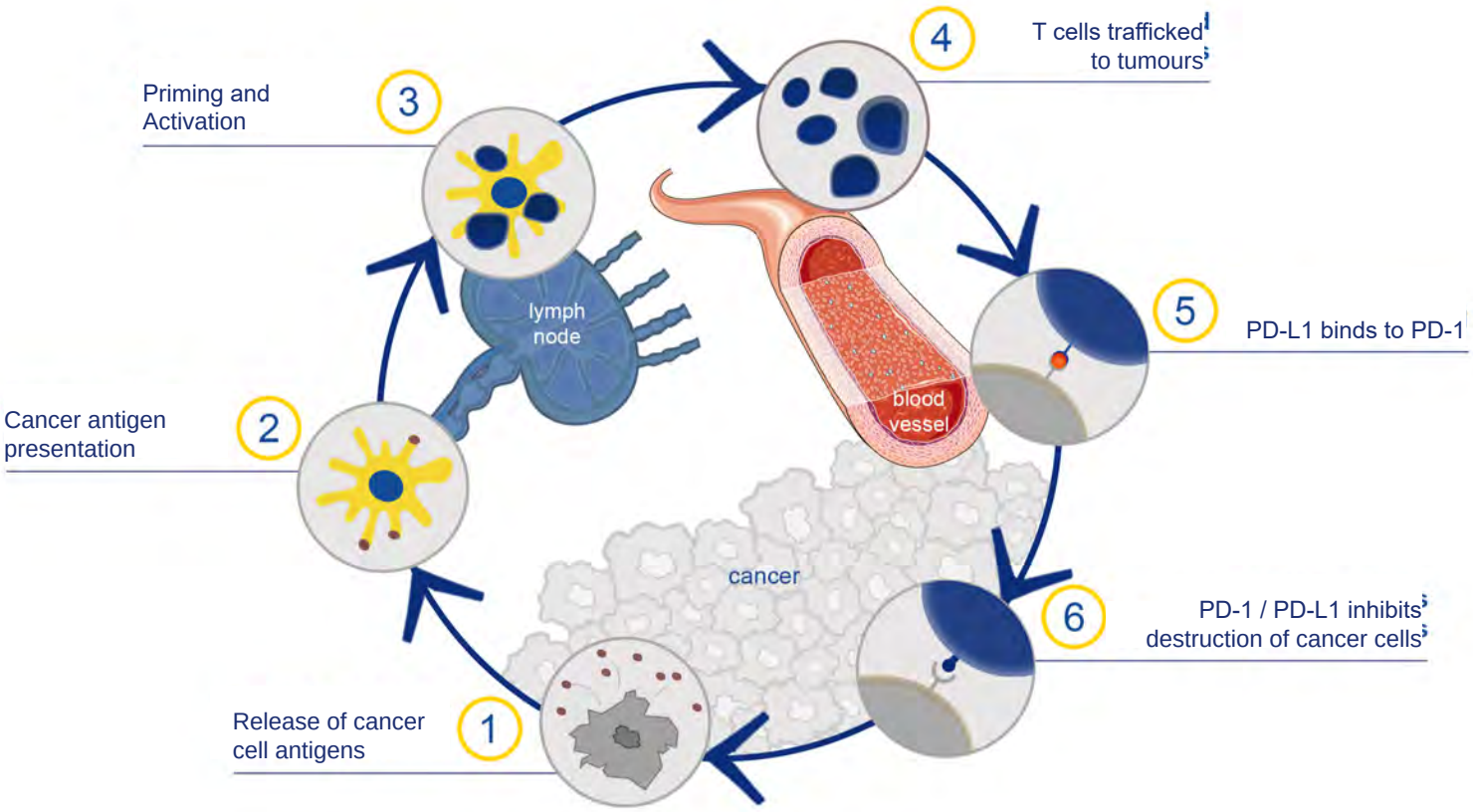
## Cancer Immunotherapy: Targeting PDL1 / PD1




The **PD-1/ PD-L1** pathway negatively regulates immune responses. PD-1 / PD-L1 binding leads to down-regulation of T-cell activity, preventing T-cell mediated cell destruction.

PD-L1, a ligand to PD-1, is over-expressed on cancer cells, creating an immunosuppressive environment that helps tumours to evade the immune system.