

# Anti-PASD1 [2ALCC128]

**Catalogue number:** 152545

**Sub-type:** Primary antibody

**Images:**

## Contributor

**Inventor:** Alison Banham ; Karen Pulford

**Institute:** University of Oxford

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** Anti-PASD1 [2ALCC128]

**Alternate name:**

**Class:** Monoclonal

**Conjugate:** Unconjugated

**Description:** Cancer testis antigens (CTAs) such as PASD1 represent attractive immunotherapy targets, having normal tissue expression that is testis restricted and commonly widespread expression in tumours. PASD1 was originally identified as a target of anti-tumour immune responses in patients with aggressive diffuse large B-cell lymphoma. Subsequent studies have identified PASD1 expression in myeloma patients (both pre- and post-treatment) and in a broad range of solid tumours, 65/160 samples (41%) from 9 histological types. Interestingly a new immune response to PASD1 was detected in a melanoma patient who exhibited a systemic immune response to palliative radiotherapy with regression of nonirradiated lesions, the abscopal effect. Delivery of immunogenic PASD1 peptides using a DNA vaccine was able to induce immune responses in preclinical models, demonstrating its potential for immunotherapy applications. There is relatively little information regarding the function of many CTAs. However, recently PASD1 has been identified as a novel regulator of the circadian clock that interacts with the CLOCK:BMAL1 complex to repress its transcriptional activation. This suggests that PASD1 may contribute to oncogenic transformation through the suppression of circadian rhythms.

**Purpose:**

**Parental cell:**

**Organism:**

**Tissue:**

**Model:**

**Gender:**

**Isotype:** IgG1

**Reactivity:** Human

**Selectivity:**

**Host:** Mouse

**Immunogen:** GST-PASD1 recombinant protein containing the 540-773 aas of PASD1, a region only present in PASD1b.

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:**

**Production details:**

**Formulation:**

**Recommended controls:** PASD-1 transfected cells and testis; BT-20 and NCI-H1299 carcinoma lines (negative control: tonsil)

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:**

## Target details

**Target:** PAS domain-containing protein 1 (PASD1), PASD1b, Per Arnt Sim domain 1

**Target alternate names:**

**Target background:** Cancer testis antigens (CTAs) such as PASD1 represent attractive immunotherapy targets, having normal tissue expression that is testis restricted and commonly widespread expression in tumours. PASD1 was originally identified as a target of anti-tumour immune responses in patients with aggressive diffuse large B-cell lymphoma. Subsequent studies have identified PASD1 expression in myeloma patients (both pre- and post-treatment) and in a broad range of solid tumours, 65/160 samples (41%) from 9 histological types. Interestingly a new immune response to PASD1 was detected in a melanoma patient who exhibited a systemic immune response to palliative radiotherapy with regression of nonirradiated lesions, the abscopal effect. Delivery of immunogenic PASD1 peptides using a DNA vaccine was able to induce immune responses in preclinical models, demonstrating its potential for immunotherapy applications. There is relatively little information regarding the function of many CTAs. However, recently PASD1 has been identified as a novel regulator of the circadian clock that interacts with the CLOCK:BMAL1 complex to repress its transcriptional activation. This suggests that PASD1 may contribute to oncogenic transformation through the suppression of circadian rhythms.

**Molecular weight:** 100 kDa

**Ic50:**

## Applications

**Application:** IF ; WB

**Application notes:**

## Handling

**Format:** Liquid

**Concentration:** 0.9-1.1 mg/ml

**Passage number:**

**Growth medium:**

**Temperature:**

**Atmosphere:**

**Volume:**

**Storage medium:**

**Storage buffer:** PBS with 0.02% azide

**Storage conditions:** -20° C

**Shipping conditions:** Shipping at 4° C

## Related tools

**Related tools:** Anti-PASD1 [2ALCC136]

## References

**References:** Sharlow et al. 2011. PLoS One. 6(10):e25134. PMID: 21998636.