Anti-human PRAME

130711BB

FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	**102-PA28**
Size:	200 µg
Lot. No.:	According to product label
Country of origin:	Germany

Preparation: Produced from sera of rabbits pre-immunized with highly pure (>95%) recombinant human PRAME C-terminal end (Met321-Asn509) from E. coli.

Target Background

Synonyms:	Melanoma antigen preferentially expressed in tumors; Opa-interacting protein 4; MAPE, OIP4

PRAME/MAPE/OIP4 is a germinal tissue-specific gene that is also expressed at high levels in haematological malignancies and solid tumors. The physiological functions of PRAME in normal and tumor cells are unknown, although a role in the regulation of retinoic acid signaling has been proposed. Sequence homology and structural predictions suggest that PRAME is related to the Leucine-rich repeat (LRR) family of proteins, which have diverse functions. PRAME, or „preferentially expressed antigen in melanoma", was originally identified as a gene encoding a HLA-A24 restricted antigenic peptide presented to autologous tumor-specific cytotoxic T lymphocytes derived from a patient with melanoma. PRAME is synonymous with MAPE (melanoma antigen preferentially expressed in tumors) and OIP4 (OPA-interacting protein 4), and its expression profile defines it as a cancer-testis antigen. Cancer-testis antigens (CTAs) are encoded by non-mutated genes expressed at high levels in germinal tissues and tumors, but which are absent from or detected at low levels in other tissues. PRAME may be somewhat different to other cancer-testis antigens in that it shows some expression in normal tissues such as ovary, adrenal, placenta and endometrium. The C-terminus of human PRAME (amino acids 453-509) was also identified to bind Neisseria gonorrhoeae opacity factors, in this case the OPA-P protein. Thus PRAME is also known as OIP4 (OPA interacting protein), although the functional implications of the interaction are unknown.

References

1. Ikeda H et al, Immunity 1997, 6:199–208
2. Haqq C et al, Proc Natl Acad Sci USA 2005, 102:6092
3. Williams JM et al, Mol Microbiol 1998, 27:171–186
4. Nakamura Y et al, Ann Surg Oncol 2007, 14:885–892

Database References Antigen

Protein RefSeq:	NP_006106.1
Uniprot ID:	P78395
mRNA RefSeq:	NM_006115.3

Product Specifications

Species reactivity	human
Clone/Ab feature	rabbit IgG
Cross reactivity	ND
Host	rabbit
Clonality	polyclonal
Purification	Protein A purified
Immunogen	Recombinant human PRAME (E. coli) (Met321-Asn509)
Formulation	lyophilized
Buffer	PBS

Stability: The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8°C. Frozen aliquots are stable for at least 6 months when stored at -20°C.

Reconstitution: Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.

AVOID REPEATED FREEZE AND THAW CYCLES!

Applications

Western Blot:	Use 1-5 µg/ml
ELISA:	Use 0,1-1µg/ml

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED BY EACH LABORATORY FOR EACH APPLICATION!

Anti-human PRAME

Handling/Applications

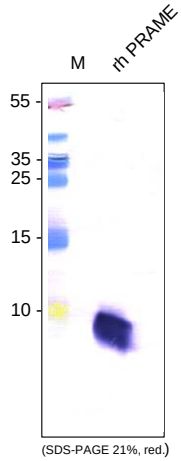

Figure 1: Western Analysis of anti-human PRAME. Sample was loaded in 21% SDS-polyacrylamide gel under reducing conditions. Lane 1: MWM (kDa); lane 2: rh PRAME.

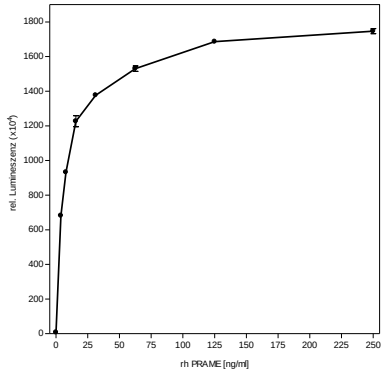

Fig. 2: ELISA using the polyclonal rabbit anti-human PRAME as detection antibody and the recombinant human PRAME fragment (ER #400-016) as standard.