



Anti-human SMCY/JARID1D

131002BB

FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	102-PA86
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 SMCY (Leu248-Leu1539) fused to a C-terminal His-tag (6x His) derived from E. coli.

Target Background

Synonyms:	Lysine-specific demethylase 5D; Histone demethylase JARID1D; Histocompatibility Y antigen
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H-Y antigen is defined as a male histocompatibility antigen that causes rejection of male skin grafts by female recipients of the same inbred strain of rodents. Male-specific, or H-Y antigen(s), are also detected by cytotoxic T cells and antibodies. H-Y antigen appears to be an integral part of the membrane of most male cells. In addition, H-Y antibodies detect a soluble form of H-Y that is secreted by the testis. The gene (Smcy/SMCY) coding for H-Y antigen detected by T cells has been cloned. It is expressed ubiquitously in male mice and humans, and encodes an epitope that triggers a specific T-cell response in vitro. Additional epitopes coded for by different Y-chromosomal genes are probably required in vivo for the rejection of male grafts by female hosts. The molecular nature of H-Y antigen detected by antibodies on most male cells is not yet known. Testis-secreted, soluble H-Y antigen, however, was found to be identical to Müllerian-inhibiting substance (MIS). MIS cross-reacts with H-Y antibodies and identical findings were obtained for soluble H-Y antigen and MIS, i.e., secretion by testicular Sertoli and, to a lesser degree, ovarian cells, binding to a gonad-specific receptor, induction of gonadal sex reversal in vitro and, in cattle, in vivo. H-Y antisera also detect a molecule or molecules associated with the heterogametic sex in non-mammalian vertebrates. Molecular data on this antigen or antigens are not yet available.

References

1. Wolf U, Cytogenet Cell Genet 80:232, 1998
2. Scott DM et al, J Mol Med (Berl) 75:103, 1997
3. Müller U, Hum Genet 97(6):701, 1996
4. Simpson e et al, Annu Rev Immunol 15:39, 1997

Database References Antigen

Protein RefSeq:	NP_001140177.1
Uniprot ID:	Q9BY66
mRNA RefSeq:	NM_001146705.1

Product Specifications

Species reactivity	human
Clone	Rabbit IgG
Cross reactivity	ND
Host	Rabbit
Clonality	polyclonal
Purification	Protein A purified
Immunogen	Recombinant human SMCY (RT #300-064)
Formulation	Lyophilized

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

NOTE: OPTIMAL DILUTIONS SHOULD BE DETERMINED by each laboratory for each application!



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Handling/Applications

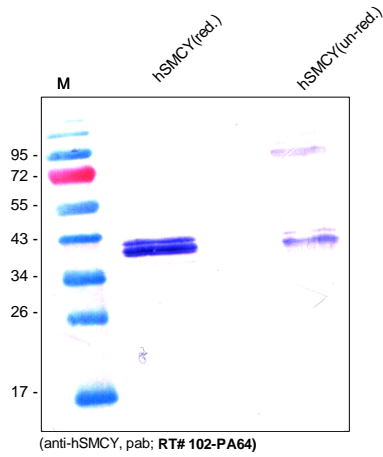


Figure 1: Western analysis of recombinant human SMCY [Cat# 300-064] using an anti-human SMCY polyclonal antibody directed against the C-terminal part of human SMCY (Leu1248-Leu1539) [UniProt: Q9BY66].