For Research Use Only.
Not for use in diagnostic procedures.

MONOCLONAL ANTIBODY

Anti-RCAS1

Code No.	Clone	Subclass	Quantity	Form
D060-3H	22-1-1	Mouse IgM	6 mL	Liquid

BACKGROUND: RCAS1 (receptor-binding cancer antigen expressed on SiSo cells) is a novel tumor-associated antigen expressed in human uterine and ovarian carcinomas. The predicted amino acid sequence of RCAS1 (213 aa) possesses an N-terminal transmembrane region and a coiled-coil structure in the C-terminal portion, indicating that RCAS1 is a type II membrane protein able to form oligomers through the coiled-coil structure. RCAS1 revealed different expression pattern from the known tumor associated antigens such as, YH206, GA733, CA125, CEA and sialyl Lewis molecules in human tumor cell lines. Recent study indicated RCAS1 acts as a ligand for a putative receptor present on various human cells including T, B and NK cells. RCAS1 inhibited the *in vitro* growth of receptor-expressing cells and induced apoptosis. It was suggested that tumor cells might evade immune surveillance by expression of RCAS1.

SOURCE: This product is culture supernatant. This hybridoma (clone 22-1-1) was established by fusion of mouse myeloma cell x63.Ag8.653 with Balb/c mouse splenocyte immunized with human uterine cervical adenocarcinoma cells.

FORMULATION: 6 mL of prediluted antibody from the supernatant with preservative (0.09% NaN_3).
*Azide may react with copper or lead in plumbing system to form explosive metal azides. Therefore, always flush plenty of water when disposing materials containing azide into drain.

STORAGE: This antibody solution is stable for 3 years from the date of purchase when stored at 4°C.

REACTIVITY: This antibody reacts with RCAS1 on Immunocytochemistry.

APPLICATIONS:
Immunocytochemistry; ready for use

Detailed procedure is provided in the following **PROTOCOLS**.
*It is reported that this antibody (clone. 22-1-1) is available for Immunohistochemistry using tissue sections of uterine and ovarian carcinomas (see reference number 7) and 8)).

INTENDED USE:
For Research Use Only. Not for use in diagnostic procedures.

SPECIES CROSS REACTIVITY:

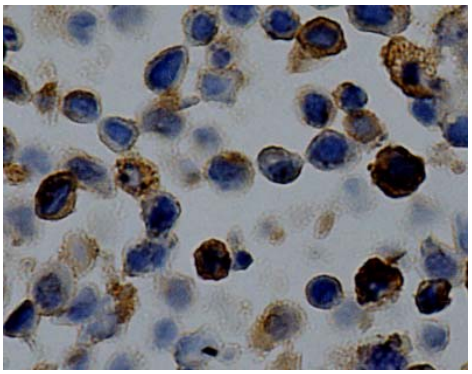
Species	Human	Mouse	Rat
Cell	SiSo	Not Tested	Not Tested
Reactivity on IHC	+		

REFERENCES:
1) Chatterjee, M., *et al*., *Cancer Res*. **66**, 1181-1190 (2006)
2) Oshikiri, T., *et al*., *Clin. Cancer Res*. **12**, 411-416 (2006)
3) Reimer, R. A., *et al*., *BMC Cancer* **5**, 47-59 (2005)
4) Leelawat, K., *et al*., *J. Clin. Pathol*. **56**, 764-768 (2003)
5) Suzuoki, M., *et al*., *Ann. Surg. Oncol*. **9**, 388-393 (2002)
6) Izumi, M., *et al*., *Cancer* **92**, 446-451 (2001)
7) Matsushima, T., *et al*., *Blood* **98**, 313-321 (2001)
8) Nakashima, M., *et al*., *Nat. Med.* **5**, 938-942 (1999)
9) Sonoda, K., *at al*., *Cancer* **77**, 1501-1509 (1996)

Clone 22-1-1 is used in these references.

RELATED PRODUCTS:

D060-3	anti-RCAS1 (22-1-1)
7583	RCAS1 ELISA Kit



Immunocytochemical detection of RCAS1 on Siso cells paraffin embedded section with D060-3H.

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PROTOCOL:

Immunocytochemical staining for paraffin-embedded sections: SAB method

1) Deparaffinize the sections with Xylene 3 times for 3-5 minutes each.
2) Wash the slides with Ethanol 3 times for 3-5 minutes each.
3) Wash the slides with PBS 3 times for 3-5 minutes each.
4) Remove the slides from PBS and cover each section with 3% H_2O_2 for 10 minutes at room temperature to block endogenous peroxidase activity. Wash 3 times in PBS for 5 minutes each.
5) Remove the slides from PBS, wipe gently around each section and cover tissues with Protein Blocking Agent (Ultratech HRP Kit, MBL; code no. IM-2391) for 5 minutes to block non-specific staining. Do not wash.
6) Tip off the blocking buffer, wipe gently around each section and cover it with one or two drops of Anti-RCAS1 (clone 22-1-1) (ready for use).
7) Incubate the sections for 1 hour at room temperature.
8) Wash the slides 3 times in PBS for 5 minutes each.
9) Wipe gently around each section and cover tissues with Polyvalent Biotinylated Antibody (Ultratech HRP Kit). Incubate for 10 minutes at room temperature. Wash as in step 8).
10) Wipe gently around each section and cover tissues with Streptavidin-Peroxidase (Ultratech HRP Kit). Incubate for 15 minutes at room temperature. Wash as in step 8).
11) Visualize by reacting for 10 minutes with substrate solution containing 7.5 mg DAB, 40 μL of 30% H_2O_2 in 150 mL PBS. *DAB is a suspect carcinogen and must be handled with care. Always wear gloves.
12) Wash the slides in water for 5 minutes.
13) Counter stain in hematoxylin for 2 minutes, wash the slides 3 times in water for 5 minutes each, and then immerse the slides in PBS for 5 minutes. Dehydrate by immersing in Ethanol 3 times for 3 minutes each, followed by immersing in Xylene 3 times for 3 minutes each.
14) Now ready for mounting.

(Positive control for Immunocytochemistry; Siso)