

SM1847LE**Monoclonal Antibody to CD253 / TRAIL (95-281) - Low Endotoxin**

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| Alternate names: | APO2L, Apo-2 ligand, Apo-2L, TNF-related apoptosis-inducing ligand, TNFSF10, Tumor necrosis factor ligand superfamily member 10 |
| Quantity: | 0.1 mg |
| Concentration: | 1.0 mg/ml |
| Background: | Human CD253 / TRAIL (TNF-Related Apoptosis Inducing Ligand), also called Apo2, is a type II membrane protein from the TNF family. TRAIL is a cytotoxic protein which activates rapid apoptosis in tumor cells, but not in normal cells. TRAIL-induced apoptosis, is achieved through binding to two death-signaling receptors, DR4 (CD261 / TRAIL-R1) and DR5 (CD262 / TRAIL-R2). |
| Uniprot ID: | P50591 |
| NCBI: | NP_003801.1 |
| GeneID: | 8743 |
| Host / Isotype: | Mouse / IgG1 |
| Recommended Isotype Controls: | SM10LE (for use in human samples) |
| Clone: | 2E5 |
| Immunogen: | Recombinant soluble fragment (aa 95-281) of human TRAIL |
| Format: | State: Liquid Ig fraction Purification: Protein A (> 95% pure by SDS-PAGE) Buffer System: Buffered saline (PBS), approx. pH 7.4; 0.2 µm filter sterilized Endotoxin Level: Less than 0.01 EU/µg of the protein, as determined by the LAL test |
| Applications: | Functional application: High neutralizing activity for human TRAIL in biological assays. Flow cytometry: 1-10 µg/ml. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user. |
| Specificity: | This antibody reacts with TRAIL (APO-2L), a 21 kDa cytotoxic protein, activator of rapid apoptosis in tumor cells. TRAIL is mainly expressed in spleen, lung, prostate and also in many other tissues. |
| Species Reactivity: | Tested: Human. Does not work in Mouse. |
| Storage: | Store undiluted at 2-8°C. DO NOT FREEZE! Shelf life: one year from despatch. |
| General Readings: | 1. Plasilova M, Zivny J, Jelinek J, Neuwirtova R, Cermak J, Necas E, et al. TRAIL (Apo2L) suppresses growth of primary human leukemia and myelodysplasia progenitors. <i>Leukemia</i> . 2002 Jan;16(1):67-73. PubMed PMID: 11840265. 2. Hyer ML, Croxton R, Krajewska M, Krajewski S, Kress CL, Lu M, et al. Synthetic triterpenoids cooperate with tumor necrosis factor-related apoptosis-inducing ligand |

to induce apoptosis of breast cancer cells. Cancer Res. 2005 Jun 1;65(11):4799-808. PubMed PMID: 15930300.

Pictures:

Apoptosis induced in JURKAT human T cell leukemia cell line by soluble recombinant human TRAIL is completely blocked by anti-human TRAIL (2E5). The neutralizing activity of the antibody 2E5 has been confirmed with various sources of soluble recombinant human TRAIL.

A - medium

B - recombinant TRAIL

C - recombinant TRAIL + anti-human TRAIL (2E5; 0.06 µg/ml)

D - recombinant TRAIL + anti-human TRAIL (2E5; 0.24 µg/ml)

E - recombinant TRAIL + Isotype mouse IgG1 control
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