

Datasheet for ABIN1690743

anti-TRAIL antibody (AA 95-281) (PE)[2 Images](#)[2 Publications](#)[Go to Product page](#)

Overview

Quantity:	0.1 mg
Target:	TRAIL (TNFSF10)
Binding Specificity:	AA 95-281
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TRAIL antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Recombinant soluble fragment (aa 95-281) of human TRAIL.
Clone:	2E5
Isotype:	IgG1
Specificity:	The antibody 2E5 reacts with an extracellular epitope within C-terminal half of 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.
No Cross-Reactivity:	Mouse
Cross-Reactivity (Details):	Human
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	TRAIL (TNFSF10)
Alternative Name:	CD253 / TRAIL (TNFSF10 Products)
Background:	TNF superfamily member 10, 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), TRAIL, Apo-2 ligand, Apo-2L, TNFSF10, APO2L, TNLG6A
Gene ID:	8743
UniProt:	P50591
Pathways:	Apoptosis , Positive Regulation of Endopeptidase Activity

Application Details

Application Notes:	Flow cytometry: Recommended dilution: 1-5 µg/mL.
Comment:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Restrictions:	For Research Use only

Handling

Concentration:	0.1 mg/mL
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Do not freeze. Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

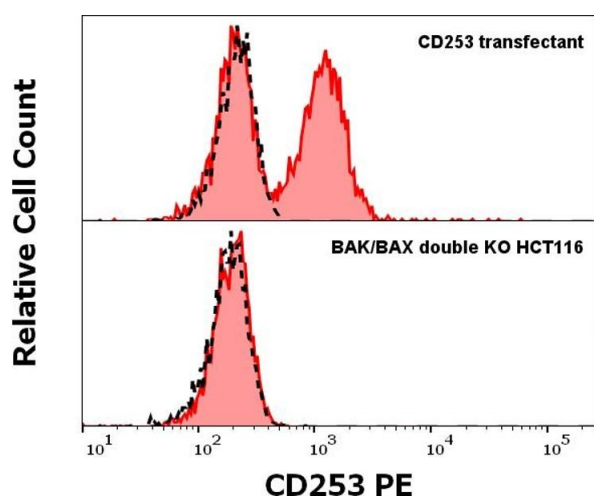
Publications

Product cited in:	Hyer, Croxton, Krajewska, Krajewski, Kress, Lu, Suh, Sporn, Cryns, Zapata, Reed: "Synthetic
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triterpenoids cooperate with tumor necrosis factor-related apoptosis-inducing ligand to induce apoptosis of breast cancer cells." in: **Cancer research**, Vol. 65, Issue 11, pp. 4799-808, (2005) ([PubMed](#)).

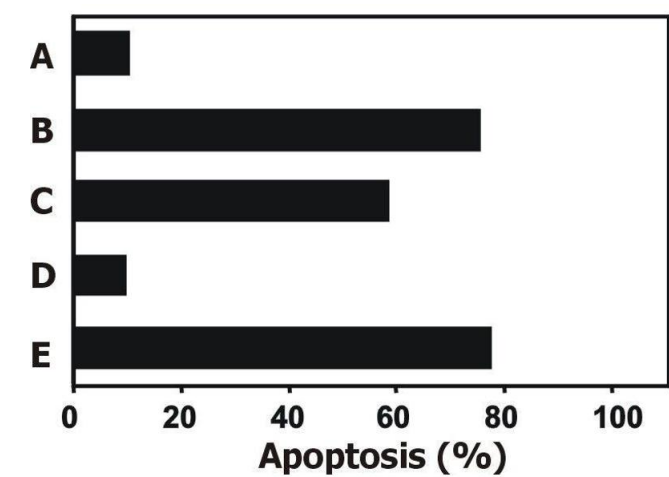
Plasilova, Zivny, Jelinek, Neuwirtova, Cermak, Necas, Andera, Stopka: "TRAIL (Apo2L) suppresses growth of primary human leukemia and myelodysplasia progenitors." in: **Leukemia**, Vol. 16, Issue 1, pp. 67-73, (2002) ([PubMed](#)).

Images



Flow Cytometry

Image 1. Anti-Hu CD253 PE antibody (clone 2E5) specificity verification by flow cytometry Colorectal cancer cell line HCT-116 with the eliminated expression of pro-apoptotic proteins BAK and BAX (prepared using CRISPR Cas9 gene editing approach) was used as host for CD253 (TRAIL) transfection. BAK/BAX double knockout cells are resistant to TRAIL-induced apoptosis. Anti-Hu CD253 PE (concentration in sample 5 µg/mL, red-filled histogram) binds specifically to surface CD253/TRAIL in transfected cells (upper panel), but not to the parent HCT-166 BAK/BAK double KO (lower panel). Level of non-specific binding was assessed using Mouse IgG1 isotype control PE (MOPC-21) under same conditions (concentration in sample 5 µg/mL, black-dashed histogram).



Apoptosis Detection

Image 2. Induction of apoptosis 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