# abcam

### Product datasheet

# Recombinant human DR5 protein (Fc Chimera) ab83547

## 3 Images

**Description** 

Product name Recombinant human DR5 protein (Fc Chimera)

**Biological activity** The ED<sub>50</sub> of DR5 Fc Chimera is typically 38-40 ng/ml as measured by its ability to neutralize

TRAIL mediated cytotoxicity using the human leukemic Jurkat cells.

**Purity** > 95 % SDS-PAGE.

Expression system HEK 293 cells

Accession <u>O14763</u>

Protein length Protein fragment

Animal free No

Nature Recombinant

**Species** Human

Sequence Theoretical sequence:

ITQQDLAPQQRAAPQQKRSSPSEGLCPPGHHISEDGRDC

**ISCKYGQDY** 

STHWNDLLFCLRCTRCDSGEVELSPCTTTRNTVCQCEEG

**TFREEDSPE** 

MCRKCRTGCPRGMVKVGDCTPWSDIECVHKEGSSNTKV

D KKVEPKSCD

KTHTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVT

CVVVDVSHE

DPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTV

**LHQDWLNGK** 

EYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSRD

**ELTKNQVSL** 

TCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSF

**FLYSKLTVD** 

KSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK

Amino acids 56 to 182

Additional sequence information Encodes the signal peptide and extracellular domain of human TRAIL R2 (aa 1-182) was fused to

the Fc region of human IgG1 (aa 90-330). The chimeric protein was expressed in modified human

293 cells.

#### **Specifications**

Our **Abpromise guarantee** covers the use of **ab83547** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** Functional Studies

SDS-PAGE

Form Lyophilized

#### **Preparation and Storage**

Stability and Storage Shipped at 4°C. After reconstitution store at -20°C. Avoid freeze / thaw cycles.

Constituents: 1% Human serum albumin, 10% Trehalose

This product is an active protein and may elicit a biological response in vivo, handle with caution.

**Reconstitution** It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial. When

reconstituted in 0.5 ml sterile phosphate-buffered saline, the solution will contain 1% human serum

albumin (HSA) and 10% trehalose.

#### **General Info**

Function Receptor for the cytotoxic ligand TNFSF10/TRAIL. The adapter molecule FADD recruits

caspase-8 to the activated receptor. The resulting death-inducing signaling complex (DISC) performs caspase-8 proteolytic activation which initiates the subsequent cascade of caspases (aspartate-specific cysteine proteases) mediating apoptosis. Promotes the activation of NF-

kappa-B. Essential for ER stress-induced apoptosis.

**Tissue specificity** Widely expressed in adult and fetal tissues; very highly expressed in tumor cell lines such as

HeLaS3, K-562, HL-60, SW480, A-549 and G-361; highly expressed in heart, peripheral blood lymphocytes, liver, pancreas, spleen, thymus, prostate, ovary, uterus, placenta, testis, esophagus,

stomach and throughout the intestinal tract; not detectable in brain.

**Involvement in disease** Squamous cell carcinoma of the head and neck

Sequence similarities Contains 1 death domain.

Contains 3 TNFR-Cys repeats.

**Cellular localization** Membrane.

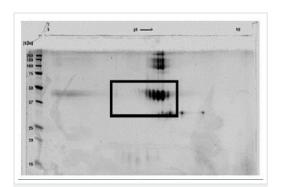
#### **Images**



SDS-PAGE - Recombinant human DR5 protein (Fc Chimera) (ab83547)

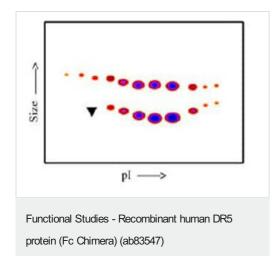
Lane 1 – MW markers; Lane 2 – ab83547; Lane 3 – ab83547 treated with PNGase F to remove potential N-linked glycans; Lane 4 – ab83547 treated with a glycosidase cocktail to remove potential N- and O-linked glycans. Approximately 5  $\mu$ g of protein was loaded per lane; Gel was stained using Coomassie.

Drop in MW after treatment with PNGase F indicates presence of N-linked glycans. A further drop in MW after treatment with the glycosidase cocktail indicates the presence of O-linked glycans. Additional bands in lane 3 and lane 4 are glycosidase enzymes.



SDS-PAGE - Recombinant human DR5 protein (Fc Chimera) (ab83547)

A sample of ab83547 without carrier protein was reduced and alkylated and focused on a 3-10 IPG strip then run on a 4-20% Tris-HCI 2D gel. Approximately 40  $\mu$ g of protein was loaded; Gel was stained using Deep Purple<sup>TM</sup>. The spot train indicates the presence of multiple isoforms of ab83547. Spots within the spot train were cut from the gel and identified as ab83547 by protein mass fingerprinting.



Post-translational modifications result in protein heterogeneity. The densitometry scan demonstrates that ab83547 exists in multiple isoforms, which differ according to their level of post-translational modification. Expression of these isoforms is highly significant for cell biology, as they more closely resemble the native human proteins

The triangle indicates theoretical pl and MW of the protein.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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