



## ERAP2 (T-15): sc-161040

### BACKGROUND

ERAP2 (Endoplasmic reticulum aminopeptidase 2), also known as Leukocyte-derived arginine aminopeptidase, is a 960 amino acid single-pass transmembrane protein on the surface of the endoplasmic reticulum that functions as a heterodimer with ERAP1 to play a central role in peptide trimming, an essential step for the generation of most HLA class I-binding peptides. This form of protein modification is crucial to cleave long precursor peptides in order to fit them to the correct length as required for presentation of MHC class-I molecules on the cell surface. Widely expressed with highest levels in spleen and leukocytes, ERAP2 preferentially hydrolyzes arginine and lysine and requires zinc as a cofactor. Defects in the gene encoding ERAP2 may result in improper antigen processing, which could lead to tumor evasion from immune surveillance.

### REFERENCES

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### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### CHROMOSOMAL LOCATION

Genetic locus: ERAP2 (human) mapping to 5q15.

### SOURCE

ERAP2 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ERAP2 of human origin.

### PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161040 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

ERAP2 (T-15) is recommended for detection of ERAP2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with ERAP1.

Suitable for use as control antibody for ERAP2 siRNA (h): sc-91852, ERAP2 shRNA Plasmid (h): sc-91852-SH and ERAP2 shRNA (h) Lentiviral Particles: sc-91852-V.

Molecular Weight of ERAP2: 110 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.