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# Anti-ACER2 Antibody

Catalog # AP60212

## Product Information

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|---|---|
| **Application** | WB |
| **Primary Accession** | Q5QJU3 |
| **Reactivity** | Human, Mouse, Rat, Mk |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 31309 |

## Additional Information

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| **Gene ID** | 340485 |
| **Other Names** | ASAH3L; Alkaline ceramidase 2; AlkCDase 2; Alkaline CDase 2; haCER2; Acylsphingosine deacylase 3-like; N-acylsphingosine amidohydrolase 3-like |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ACER2. The exact sequence is proprietary. |
| **Dilution** | WB~~WB (1/500 - 1/1000) |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

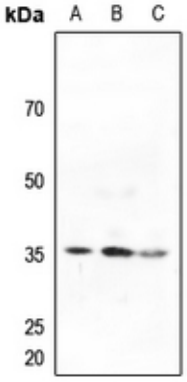
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|---|---|
| **Name** | ACER2 ( HGNC:23675) |
| **Synonyms** | ASAH3L |
| **Function** | Golgi ceramidase that catalyzes the hydrolysis of ceramides into sphingoid bases like sphingosine and free fatty acids at alkaline pH (PubMed:16940153, PubMed:18945876, PubMed:20089856, PubMed:20207939). Ceramides, sphingosine, and its phosphorylated form sphingosine-1-phosphate are bioactive lipids that mediate cellular signaling pathways regulating several biological processes including cell proliferation, apoptosis and differentiation (PubMed:20207939). Has a better catalytic efficiency towards unsaturated long-chain ceramides, including C18:1-, C20:1- and C24:1-ceramides (PubMed:16940153, PubMed:18945876, PubMed:20089856, PubMed:20207939). Saturated long-chain ceramides and unsaturated very long-chain ceramides are also good substrates, whereas saturated very long-chain ceramides and short-chain ceramides are poor substrates (PubMed:20089856). Also hydrolyzes dihydroceramides to produce |

dihydrosphingosine (PubMed:20207939, PubMed:20628055). It is the ceramidase that controls the levels of circulating sphingosine-1- phosphate and dihydrosphingosine-1-phosphate in plasma through their production by hematopoietic cells (By similarity). Regulates cell proliferation, autophagy and apoptosis by the production of sphingosine and sphingosine-1-phosphate (PubMed:16940153, PubMed:26943039, PubMed:28294157, PubMed:29229990). As part of a p53/TP53-dependent pathway, promotes for instance autophagy and apoptosis in response to DNA damage (PubMed:26943039, PubMed:28294157, PubMed:29229990). Through the production of sphingosine, may also regulate the function of the Golgi complex and regulate the glycosylation of proteins (PubMed:18945876).

**Cellular Location** Golgi apparatus membrane; Multi-pass membrane protein

**Tissue Location** Highly expressed in placenta.

## Images




Western blot analysis of ACER2 expression in Hela (A), H460 (B), A2780 (C) whole cell lysates. (Predicted band size: 31 kD; Observed band size: 35 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.