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Anti-CES2 Antibody

Catalog # AP59757

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O00748
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61807

Additional Information

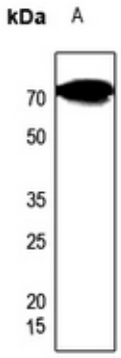
Gene ID	8824
Other Names	ICE; Cocaine esterase; Carboxylesterase 2; CE-2; hCE-2; Methylumbelliferyl-acetate deacetylase 2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CES2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IHC~~WB (1/500 - 1/1000), IHC (1/100 - 1/200) IF/IC~~N/A
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

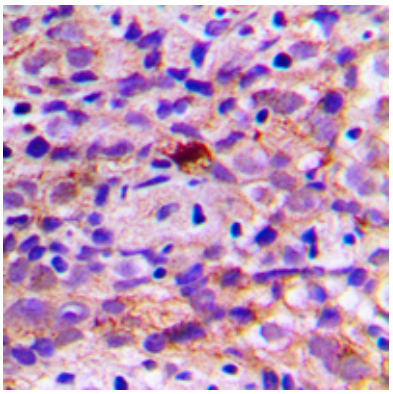
Name	CES2 (HGNC:1864)
Synonyms	ICE
Function	Involved in the detoxification of xenobiotics and in the activation of ester and amide prodrugs (PubMed:9169443). Shows high catalytic efficiency for hydrolysis of cocaine, 4-methylumbelliferyl acetate, heroin and 6-monoacetylmorphine (PubMed:9169443). Hydrolyzes aspirin, substrates with large alcohol group and small acyl group and endogenous lipids such as triacylglycerol (PubMed:28677105). Converts monoacylglycerides to free fatty acids and glycerol. Hydrolyzes of 2- arachidonoylglycerol and prostaglandins (PubMed:21049984).
Cellular Location	Endoplasmic reticulum lumen
Tissue Location	Preferentially expressed in intestine with moderate expression in liver. Within

the intestine, highest expression is found in small intestine with lower expression in colon and rectum

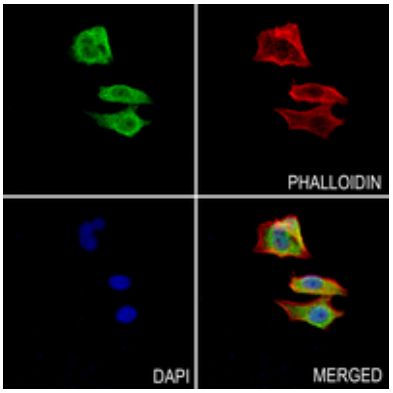
Images



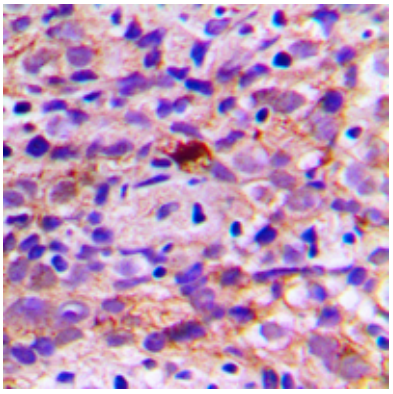
Western blot analysis of CES2 expression in rat kidney (A) whole cell lysates. (Predicted band size: 61, 68 kD; Observed band size: 68 kD)



Immunohistochemical analysis of CES2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of CES2 staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).



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