

Product datasheet

Recombinant Human GABARAPL1 protein ab101641

1 Image

Description

Product name	Recombinant Human GABARAPL1 protein	
Purity	> 85 % SDS-PAGE. ab101641 was purified using anion-exchange chromatography (DEAE sepharose resin) and gel-filtration chromatography (Sephacryl S-200) with 20mM Tris pH 7.5, 2mM EDTA.	
Expression system	Escherichia coli	
Accession	<u>Q9H0R8</u>	
Protein length	Full length protein	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	MGSSHHHHHSSGLVPRGSHMKFQYKEDHPFEYRKKE GEKIRKKYPDRVP VVEKAPKARVPDLDKRKYLVPSDLTVGQFYFLIRKRIHLRP EDALFFV NNTIPPTSATMGQLYEDNHEEDYFLYVAYSDESVMYK	
Predicted molecular weight	16 kDa including tags	
Amino acids	1 to 117	
Tags	His tag N-Terminus	

Specifications

Our **Abpromise guarantee** covers the use of **ab101641** in the following tested applications.

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

Applications	SDS-PAGE
	Mass Spectrometry
Mass spectrometry	MALDI-TOF
Form	Liquid

Preparation and Storage

Stability and Storage Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

pH: 8.00

Constituents: 0.0154% DTT, 0.316% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.58% Sodium chloride

General Info

Function

Ubiquitin-like modifier that increases cell-surface expression of kappa-type opioid receptor through facilitating anterograde intracellular trafficking of the receptor. Involved in formation of autophagosomal vacuoles. Whereas LC3s are involved in elongation of the phagophore membrane, the GABARAP/GATE-16 subfamily is essential for a later stage in autophagosome maturation.

Tissue specificity

Ubiquitous. Expressed at very high levels in the brain, heart, peripheral blood leukocytes, liver, kidney, placenta and skeletal muscle. Expressed at very low levels in thymus and small intestine. In the brain, expression is particularly intense in motoneurons in the embryo and in neurons involved in somatomotor and neuroendocrine functions in the adult, particularly in the substantia nigra pars compacta.

Sequence similarities

Belongs to the ATG8 family.

Post-translational modifications

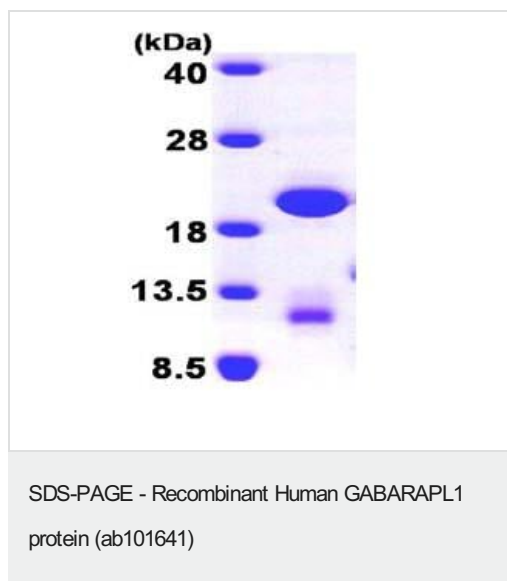
The precursor molecule is cleaved by ATG4B to form the cytosolic form, GABARAPL1-I. This is activated by APG7L/ATG7, transferred to ATG3 and conjugated to phospholipid to form the membrane-bound form, GABARAPL1-II (By similarity). ATG4B also mediates the delipidation required for GABARAPL1 recycling when autophagosomes fuse with lysosomes.

The Legionella effector RavZ is a deconjugating enzyme that produces an ATG8 product that would be resistant to re-conjugation by the host machinery due to the cleavage of the reactive C-terminal glycine.

Cellular localization

Cytoplasm > cytoskeleton. Cytoplasmic vesicle membrane. Endoplasmic reticulum. Golgi apparatus. Cytoplasmic vesicle > autophagosome.

Images



ab101641 at 3 µg analysed by 15% SDS PAGE.

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