

# ATG9A (S848) polyclonal antibody

Catalog: BCP00250 Host: Rabbit Reactivity: Human, Rat, Mouse

#### **BackGround:**

Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of bulk cytoplasmic contents. It is generally activated by conditions of nutrient deprivation but is also associated with a number of physiological processes including development, differentiation, neurodegeneration, infection, and cancer. The molecular machinery of autophagy was largely discovered in yeast and is directed by a number of autophagy-related (Atg) genes.

Atg9, one of the Atg proteins identified in yeast, is essential for autophagosome formation. There are two human functional orthologues based on the yeast homolog Atg9p: Atg9A, which has also been identified as Atg9L1 and mAtg9, and Atg9L2, which was first reported as nitric-oxide synthase 3 antisense (NOS3AS). Atg9A is an integral membrane protein that is required for both the initiation and the expansion of the autophagosome. Recruitment of Atg9A to the autophagosomal membrane is dynamic and transient as Atg9A also cycles between autophagy-related structures known as omegasomes, the trans-Golgi network (TGN), and endosomes, and at no point becomes a stable component of the autophagosomal membrane. The precise regulation of Atg9A trafficking is not fully clarified, yet it is suggested to involve p38 mitogen-activated protein kinase (MAPK)-binding protein p38IP and the Beclin-1-binding protein Bif-1.

#### **Product:**

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2.

# **Molecular Weight:**

~ 90 kDa

#### **Swiss-Prot:**

Q7Z3C6

# **Purification&Purity:**

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

## **Applications:**

WB: 1:1000~1:2000

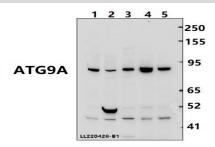
# Storage&Stability:

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at  $-20\,\mathrm{C}$  long term. Avoid freeze-thaw cycles.

## **Specificity:**

ATG9A (S848) polyclonal antibody detects endogenous levels of ATG9A protein.

## **DATA:**



Western blot (WB) analysis of ATG9A (S848) polyclonal antibody at

1:1000 dilution

Lane1:CT-26 whole cell lysate(40ug)

Lane2:PC12 whole cell lysate(40ug)

Lane3:HEK293T whole cell lysate(40ug)

Lane4:HepG2 whole cell lysate(40ug)

Lane5:A549 whole cell lysate(40ug)

## Note:

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