

# Recombinant Protein Technical Manual Recombinant Mouse CHI3L1/YKL40 Protein (His Tag)

**RPES3797** 

#### **Product Data:**

**Product SKU:** RPES3797 **Size:** 50μg

Species: Mouse Expression host: HEK293 Cells

**Uniprot: Q61362** 

### **Protein Information:**

Molecular Mass: 42.3 kDa

AP Molecular Mass: 50 kDa

Tag: C-His

**Bio-activity:** 

**Purity:** > 97 % as determined by SDS-PAGE

**Endotoxin:**  $< 1.0 \text{ EU per } \mu \text{g}$  of the protein as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

Application:

**Synonyms:** AW208766;Brp39;Gp39

## **Immunogen Information:**

Sequence: Met 1-Ala 381

## Background:

Chitinase-3-like protein 1 (CHI3L1) is a secreted heparin-binding glycoprotein whose expression is associated with vascular smooth muscle cell migration. CHI3L1 is expressed at high levels in postconfluent nodular VSMC cultures and at low levels in subconfluent proliferating cultures. CHI3L1 is a tissue-restricted, chitin-binding lectin and member of glycosyl hydrolase family 18. In contrast to many other monocyto / macrophage markers, its expression is absent in monocytes and strong induced during late stages of human macrophage differentiation. Elevated levels of CHI3L1 are associated with disorders exhibiting increased connective tissue turnover, such as rheum atoid, arthritis, osteoarthritis, scleroderma, and cirrhosis of liver, but is produced in cartilage from old donors or patiens with osteoarthritis. CHI3L1 is abnormally expressed in the hippocampus of subjects with schizophrenia and may be involved in the cellular response to various environmental events that are reported to increase the risk of schizophrenia.