

# **Product datasheet for TP728217**

# OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### **Recombinant Galectin-8, Human**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant Galectin-8, Human

Species: Human
Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

MLSLNNLQNIIYNPVIPFVGTIPDQLDPGTLIVIRGHVPSDADRFQVDLQNGSSMKPRADVAFHFNPRFKR AGCIVCNTLINEKWGREEITYDTPFKREKSFEIVIMVLKDKFQVAVNGKHTLLYGHRIGPEKIDTLGIYGKVNI

HSIGFSFSSDLQSTQASSLELTEISRENVPKSGTPQLRLPFAARLNTPMGPGRTVVVKGEVNANAKSFNVD LLAGKSKDIALHLNPRLNIKAFVRNSFLQESWGEEERNITSFPFSPGMYFEMIIYCDVREFKVAVNGVHSLEY

KHRFKELSSIDTLEINGDIHLLEVRSW with polyhistidine tag at the N-terminus.

Tag: His Tag (N-term)

**Predicted MW:** The protein has a calculated MW of 36.6 kDa. The protein migrates as 34 kDa under reducing

condition (SDS-PAGE analysis).

**Purity:** >98% as determined by SDS-PAGE.

Buffer: The protein was lyophilized from a 0.2 µm filtered solution containing 1X PBS, pH 7.4.

**Bioactivity:** Measured by its ability to agglutinate human red blood cells. The ED₅₀ for this effect is <8

μg/mL.

**Endotoxin:** <0.1 EU per 1 µg of the protein by the LAL method.

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100  $\mu g/mL$  and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

**Applications:** Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

 $8^{\circ}\text{C}$  for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: 000214

Synonyms: LGALS8, Gal-8, PCTA-1, PCTA1, Po66-CBP

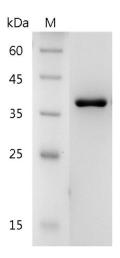




#### **Summary:**

Galectin-8 (Gal-8) is a lectin family member and is one of the tandem repeat-type galectins containing two carbohydrate recognition domains (CRD) connected by a linker region in a single peptide chain. The CRD is responsible for  $\beta$ -galactoside binding, and the binding partners for galectin-8 have been identified, including CD44 and a subset of integrins. Galectin-8 and integrins form complexes, subsequently leading to phosphorylation of paxillin and focal adhesion kinase (FAK), which activates signal pathways including MAPK-ERK and PI3K-AKT pathways. Galectin-8 is constitutively presented in the Liver, kidney, cardiac muscle, lung, and brain. Galectin-8 serves as an immunosuppressive protective role against autoimmune CNS inflammation, regulating the balance of Th17 and Th1 polarization.

# **Product images:**



SDS- PAGE analysis of recombinant human Galectin-8