

Product datasheet for TP728217L

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

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°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: <u>000214</u>

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

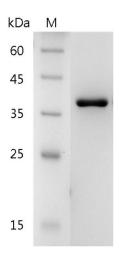




Summary:

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 β -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