

Recombinant Human Galectin-8/LGALS8 Protein

Cat.NO.: TP04960

3th Edition

Synonyms: Galectin-8; Gal-8; Po66 Carbohydrate-Binding Protein; Po66-CBP; Prostate Carcinoma Tumor Antigen 1; PCTA-1; LGALS8

Description: The Galectin family of proteins, with specificity for N-acetyllactosamine-containing glycoproteins, consists of beta-galactoside binding lectins containing homologous carbohydrate recognition domains (CRDs). They also possess hemagglutination activity, which is attributable to their bivalent carbohydrate binding properties. Galectins are active both intracellularly and extracellularly. Although they are localized primarily in the cytoplasm and lack a classical signal peptide, galectins can also be secreted by one or more unidentified, non-classical, secretory pathways. They have diverse effects on many cellular functions including adhesion, migration, polarity, chemotaxis, proliferation, apoptosis, and differentiation. Galectins may therefore play a key role in many pathological states, including autoimmune diseases, allergic reactions, inflammation, tumor cell metastasis, atherosclerosis, and diabetic complications. The galectins have been classified into the prototype galectins (1, 2, 5, 7, 10, 11, 13, 14), which contain one CRD and exist either as a monomer or a noncovalent homodimer. The chimera galectins (Galectin 3) containing one CRD linked to a nonlectin domain, and the tandem repeat Galectins (4, 6, 8, 9, 12) consisting of two CRDs joined by a linker peptide. Galectins lack a classical signal peptide and can be localized to the cytosolic compartments where they have intracellular functions. However, via one or more as yet unidentified nonclassical secretory pathways, galectins can also be secreted to function extracellularly. Individual members of the galectin family have different tissue distribution profiles and exhibit subtle differences in their carbohydrate-binding specificities. Each family member may preferentially bind to a unique subset of cell surface glycoproteins.

Form: PBS

Molecular Weight: 35.8 kDa

Sequences: Met 1-Trp317

Purity: > 95% by HPLC

Concentration:

Endotoxin Level: <1.0 EU per 1 µg of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.