Background: Galectins are a family of $\beta$-galactose binding proteins that are characterized by an affinity for poly-N-acetyllactosamine-enriched glycoconjugates and a carbohydrate-binding site (1,2). Members of the galectin family have been implicated in a variety of biological functions including cell adhesion (3), growth regulation (4), cytokine production (5), T-cell apoptosis (6), and immune responses (7).

Galectin-3/LGALS3 is involved in several diverse biological functions. Galectin-3/LGALS3 binds IgE (8). Galectin-3/LGALS3 is an unusual protein in that can be found both extracellularly and intracellularly. Intracellularly, galectin-3/LGALS3 can localize to the cytoplasm, nucleus, or both, depending on cell type and experimental conditions. Nuclear galectin-3/LGALS3 has been identified as a pre-mRNA splicing factor (9). Galectin-3/LGALS3 production has been shown to increase during inflammation and in obesity, and the protein itself can have an inflammatory effect under certain conditions (10). Galectin-3/LGALS3 forms a complex with $\alpha_3$, $\beta_1$ integrin to act as a surface receptor on endothelial cells for the NG2 proteoglycan, which triggers cell motility and angiogenesis (11). In addition to these functions, galectin-3/LGALS3 is also a required factor for the terminal differentiation of epithelial cells (12).


Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human galectin-3/LGALS3 protein. Antibodies are purified by protein A and peptide affinity chromatography.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.