# Human Galectin 9 protein, His tag

# Cat. No. GTX00111-pro

Applications	Functional Assay	<mark>Package</mark> 10 μg
Species	Human	

#### Applications

#### **Application Note**

GAL9 (Galectin-9) belongs to the galectin family, which is defined by their binding specificity for  $\beta$ -galactoside sugars, such as N-acetyllactosamine (Gal $\beta$ 1-3GlcNAc or Gal $\beta$ 1-4GlcNAc). It is reported that GAL9 induces T-helper type 1 lymphocyte (Th1) death by binding to HAVCR2 (Hepatitis A virus cellular receptor 2); besides, the interaction between GAL9 and PDI (Protein disulfide-isomerase) leads to disulfide reductase activity increasing at the plasma membrane, therefore alters the plasma membrane redox state and enhances cell migration. Thus a binding ELISA assay was conducted to detect the interaction of recombinant human GAL9 with recombinant human HAVCR2 and recombinant human PDI separately. Briefly, GAL9 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to HAVCR2-coated and PDI-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-GAL9 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of GAL9 with HAVCR2 and PDI were shown in images, and this effect was in a dose dependent manner.

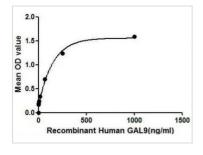
Observed	IVIVV	(KDa)	40 kDa.	

Properties		
Form	Lyophilized powder	
Buffer	Batch dependent (please contact us for details)	
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.	
Region/Sequence	N-terminal His-Tag; Met1~Thr355 (NP_001317092.1)	
Expression System	E. coli	
Purity	> 90%	
Endotoxin	< 1 EU/µg	
Conjugation	Unconjugated	
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.	



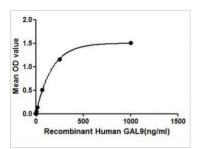
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### DATA IMAGES



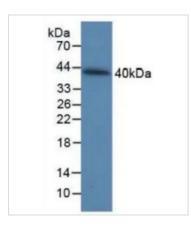
# GTX00111-pro Functional Assay Image

Functional ELISA analysis of GTX00111-pro Human Galectin 9 protein which can bind immobilized PDI protein.



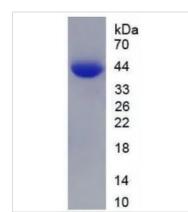
## GTX00111-pro Functional Assay Image

Functional ELISA analysis of GTX00111-pro Human Galectin 9 protein which can bind immobilized HAVCR2 protein.



#### GTX00111-pro Image

WB analysis of GTX00111-pro Human Galectin 9 protein.



#### GTX00111-pro Image

SDS-PAGE analysis of GTX00111-pro Human Galectin 9 protein.



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