

## Anti-GLP-2: Rabbit Glucagon-like peptide-2 Antibody

### Anti-GLP-2: Rabbit Glucagon-like peptide-2 Antibody (Supplier: Cell Applications, Inc.)

#### BACKGROUND

The GLPs belong to a larger family referred to as the glucagon superfamily of peptide hormones. These hormones are classified within this family based on their considerable sequence homology with glucagon. Included in this family are: glucagon, GLP-1(7-37) and -(7-36)amide, GIP, exendin-3 and -4, secretin, peptide histidine-methionine amide (PHM), GLP-2, helospectin-1 and -2, helodermin, pituitary adenylyl cyclase-activating polypeptides (PACAP)-38, and -27, PACAP-related peptide (PRP), GH-releasing factor (GRF), and vasoactive intestinal polypeptide (VIP). These peptide hormones are produced in the gut, pancreas, and the central and peripheral nervous systems and exhibit a wide variety of biological actions in which several act as neurotransmitters. The proglucagon consists of the glicentin-specific peptide and followed in order by the sequences that encode glucagon, GLP-1, and GLP-2. The glucagon, GLP-1, and GLP-2 sequences are interrupted by short spacer sequences that encode intervening peptides. Several of the enzymes that posttranslationally cleave proproteins into peptides or hormones have been identified. These enzymes comprise a family known as subtilisins or subtilisin-like proprotein convertases, otherwise known as prohormone convertases (PCs). Notably, even peptide hormones that are co-encoded within the same precursor, such as the peptide hormones derived from the cleavages of proglucagon, differ significantly in the physiological processes that they regulate. For example, the major function of glucagon is to maintain blood glucose levels during fasting, whereas GLP-1 functions primarily during feeding to stimulate insulin release and to lower blood glucose levels. On the other hand, GLP-2 appears to regulate the growth of intestinal epithelial cells.<sup>1</sup>

GLP-2 stimulates intestinal growth and up-regulates villus height in the small intestine, concomitant with increased crypt cell proliferation and decreased enterocyte apoptosis.<sup>2</sup> The gastrointestinal tract, from the stomach to the colon is the principal target for GLP-2 action. It plays a key role in nutrient homeostasis, enhancing nutrient assimilation through enhanced gastrointestinal function, as well as increasing nutrient disposal. GLP-2 stimulates intestinal glucose transport and decreases mucosal permeability.<sup>3</sup>

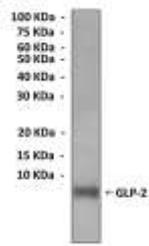


Fig.: GLP-2 antibody specifically reacts with GLP-2 polypeptides (5ng/lane) in Western blot.

#### REFERENCES

1. Kieffer, T.J. & Habener, J.F.: Endocr. Rev. 20: 876-913, 1999
2. Drucker, D.J.: Mol. Endocrinol. 17:161-71, 2003
3. Jeppensen, P.B.: J. Nutr. 133:3721-4, 2004

Antigen:	Short peptide from human GLP-2 sequence.
Isotype:	Rabbit IgG
Species & predicted species cross-reactivity ( ):	Human, Mouse, Rat
Applications & Suggested starting dilutions:*	WB 1:500 - 1:1000 IP 1:100 IHC n/d ICC n/d FACS n/d
Predicted Molecular Weight of protein:	4 kDa
Specificity/Sensitivity:	Detects endogenous GLP-2 polypeptides without cross-reactivity with other family members.
Storage:	Store at -20°C, 4°C for frequent use. Avoid repeated freeze-thaw cycles.

**\*\* Products are for research use only. They are not intended for human, animal, or diagnostic applications. \*\***

#### Product Information

- Catalogue number: PB-CG1175
- Size: 100 µl

**ORDER UNDER [www.pelobiotech.com](http://www.pelobiotech.com) or FAX + 49 (0)89 517 286 59-88**