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[\[PDF \(321K\)\]](#) [\[References\]](#)***N*-Linked Oligosaccharide Processing Enzymes as Molecular Targets for Drug Discovery**

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N-Linked oligosaccharide processing enzymes are key enzymes in the biosynthesis of *N*-linked oligosaccharides. These enzymes are a molecular target for inhibition by anti-viral agents that interfere with the formation of essential glycoproteins required in viral assembly, secretion and infectivity. We think that the molecular recognition of three kinds of glucosidases (family 13 and family 31 α -glucosidases and endoplasmic reticulum glucosidases) are different. Therefore, glycon and aglycon specificity profiling of glucosidases was an important approach for the research of glucosidase inhibitors. We carried out the profiling of glucosidases using small molecules as a probe. Moreover, we designed and synthesized three types of glucosidase inhibitors. These compounds were evaluated with regard to their ability to inhibit glucosidases *in vitro*, and were also tested in a cell culture system. We found some compounds having glucosidase inhibitory activity and anti-viral activity.

Key words: α -glucosidase, ER glucosidase, inhibitor, anti-viral activity

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