E301 Anticoagulany activity from *Ganoderma lucidum*

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Metalloprotease was purifed from mycelium of edible mushroom, *Ganoderma lucidum*. The enzyme was purified by anion exchange, chromatofocusing, and gel filtration chromatography. The M_r was determined to be 50,000 by SDS-PAGE and 100,000 by gel filtration on a Sephadex G-150 column, indicating that it is a dimer. The enzyme was inhibited by EDTA, 1,10-phenanthroline, and phosphoamidon. The presence of Zn^{2+} was detected by ICP mass spectral analysis as 1.1 mol of Zn^{2+} per mol of protease. This protease hydrolyzed A_α and B_β chains of human fibrinogen, but did not cleave thrombin, albumin, hemoglobin, and immunoglobulin. It also showed anticoagulanet activity. The enzyme delayed the thrombin time and activated partial thromboplastin time.

E302 Specific Inhibition of PLC by CRM51005

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In many cancer or trnasformed cells, the level of PLCγ1 is elevate compared with normal cells. Therefore PLC and PI-turnover inhibitors would be expected to be tumor cell growth inhibitors. CRM51005, produced by unidentified fungal strainMT51005, dose-dependently reduced the PLCγ1 activity in PDGF-induced NIH3T3$_{\gamma 1}$ cells and in EGF-stimulate A431 cells. PLCγ1 activity was also decreased by CRM51005 *in vitro*. However, CRM51005 did not reduced the tyrosine phosphorylation of PLCγ1 and autophosphorylation of EGFR in respones to EGF in A431 cells. *In vitro* assay also showed that CRM51005 had no inhibition against EGFR kinase activity. In addition there was no effect on the activities of PKC and PTPases by CRM51005. From these results, it is suggested that CRM51005 inhibits PLCγ1 activity but not activation of receptor tyrosine kinase in intact cells.