28pmA-158 側鰓類 Pleurobranchus forskalii 由来の生物活性物質 ○Karen TAN¹, 脇本 敏幸¹², 阿部 郁朗¹²(¹東大院薬,²JST-CREST)

[Objective] Marine molluscs are typically protected against predation by hard external shells. Shell-less molluscs that lack physical protection, such as the opisthobranch molluscs, presumably defend themselves through chemical secretions. Consequently, they are considered as rich sources of biologically active compounds. For instance, a bioactive cyclic peptide, keenamide A, and cytotoxic lissoclimide-type diterpenes have been isolated from the mollusc, *Pleurobranchus forskalii*, obtained from Manado, Indonesia and Sta. Rosa, Philippines, respectively. Hence, the objective of this study is to isolate biologically active compounds from *P. forskalii*, a marine slug, gastropod molluse that was collected from the waters near Ishigaki Island, Japan.

[Methodology] Bioactive-guided fractionation was carried out using cytotoxicity screening against murine leukemia (P388) cells. The active fractions were purified by chromatographic techniques, such as silica gel chromatography and reversed phase HPLC. The structures of the isolated bioactive compounds were determined by extensive NMR analyses

[Results & Discussion] Ergosinine, a known mycotoxin, was isolated and represents the first ergopeptine found in marine life. A cytotoxic cyclic peptide, whose structure is currently under investigation, was also obtained. These results indicate that marine molluscs, together with their symbionts, are a rich source of biologically active molecules.

Ergosinine