Cloning of gene responds to salt stress of sugarcane U-Thong1 which their seedlings were treated in 0.0% and 2.0% (W/V) of NaCl for 48 hours. Total RNA was extracted from the sample and their mRNA were purified. cDNA synthesis from 0.0% and 2.0% (w/v) mRNA were cDNA cloned. The positive recombinant clones were selected by colony hybridization using 2.0% cDNA as a probe. Clone 302 was selected and their DNA nucleotide was 797 bp in length. Gene expression was detected by dot blot hybridization method. The total RNA which was treated in 2.0% (W/V) of NaCl showed positive result. DNA nucleotide and amino acid sequence were compared with the GenBank database. The result showed partly of clone 302 sequence exhibited partail homology to cysteine proteinase inhibitor (cystatin) of several plants.