

3-4-2. Molecular Characterization of Blue Pigment Binding Protein-1 from *Pieris rapae*.

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We cloned and molecularly characterized a blue pigment binding protein-1 (BP-1) cDNA from cabbage white butterfly. The cDNA has a length of 474 bp coding for a 158-residue protein with a predicted molecular mass of 18,051 Da. The calculated isoelectric point is 8.2. Multiple alignment analysis of amino acid sequence revealed that BP-1 is most similar to bilin-binding protein (BBP) from *Pieris brassicae* (93%) followed by BBP of *Galleria mellonella* (48.7%). The BP-1 transcript was detected by Northern blot analysis in fat body and midgut.