

$pb11$

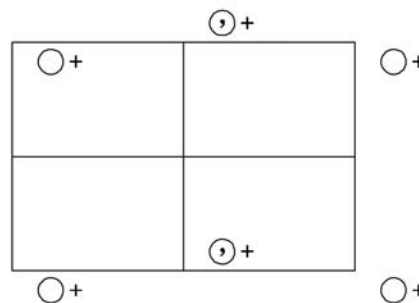
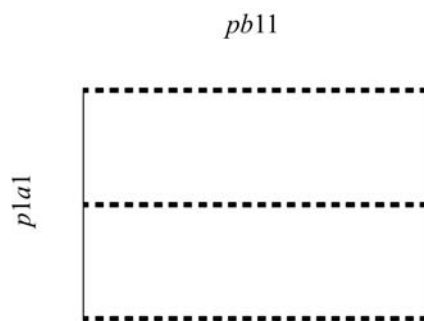
$m$

Monoclinic/Rectangular

No. 12

$pb11$

Patterson symmetry  $p2/m11$



**Origin** on glide plane  $b$

**Asymmetric unit**  $0 \leq x \leq \frac{1}{2}; 0 \leq y \leq 1$

**Symmetry operations**

- (1)  $1$   $(1|0,0,0)$       (2)  $b$   $0,y,z$   
 $(m_x|0,\frac{1}{2},0)$

**Generators selected** (1);  $t(1,0,0)$ ;  $t(0,1,0)$ ; (2)

**Positions**

Multiplicity, Wyckoff letter, Site symmetry	Coordinates	Reflection conditions
2 <i>a</i> 1	(1) $x, y, z$ (2) $\bar{x}, y + \frac{1}{2}, z$	General: $0k: k = 2n$

**Symmetry of special projections**

Along [001] $p1g1$ $\mathbf{a}' = \mathbf{a}$ $\mathbf{b}' = \mathbf{b}_p$ Origin at $0, 0, z$	Along [100] $\bar{1}111$ $\mathbf{a}' = \frac{1}{2}\mathbf{b}$ Origin at $x, 0, 0$	Along [010] $\bar{1}m1$ $\mathbf{a}' = \mathbf{a}$ Origin at $0, y, 0$
--	--	--

**Maximal non-isotypic subgroups**

<b>I</b> [2] $p1(1) 1$
<b>IIa</b> none
<b>IIb</b> none

**Maximal isotypic subgroups of lowest index**

<b>IIc</b> [2] $pb11(\mathbf{a}' = 2\mathbf{a})(12)$
--

**Minimal non-isotypic supergroups**

<b>I</b> [2] $p2/b11(16)$ ; [2] $p2_1/b11(17)$ ; [2] $pma2(24)$ ; [2] $pba2(25)$ ; [2] $pb2_1m(29)$ ; [2] $pb2b(30)$ ; [2] $pb2_1a(33)$ ; [2] $pb2n(34)$
<b>II</b> [2] $cm11(13)$ ; [2] $pm11(\mathbf{b}' = \frac{1}{2}\mathbf{b})(11)$