

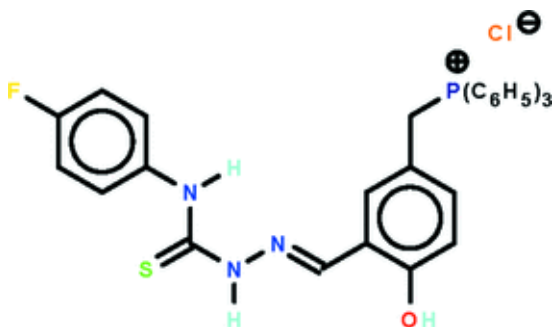
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**[3-((*E*)-2-[(4-Fluorophenyl)carbamothioyl]hydrazinylidene)methyl)-4-hydroxybenzyl] methyltriphenylphosphonium chloride**

**S. K. Sinniah, K. W. Tan, K. S. Sim, S. W. Ng and E. R. T. Tiekink**

**Abstract:** The cation in the title salt,  $C_{33}H_{28}FN_3OPS^+Cl^-$ , is highly twisted with the phosphonium group occupying a position almost normal to the central hydroxylbenzene ring [P-C-C-C torsion angle =  $-100.9(3)^\circ$ ], and with the hydrazone substituent twisted out of the plane [C-C-C-N torsion angle =  $13.1(4)^\circ$ ]. The fluorobenzene ring is twisted out of the plane of the adjacent thiourea residue, forming a dihedral angle of  $51.69(10)^\circ$ . The configuration about the C=N bond [ $1.281(4) \text{ \AA}$ ] is *E*, the O-H and N-H hydrogen atoms are *syn*, and in the thiourea residue, the N-H hydrogen atoms are *anti*, allowing for the formation of an intramolecular N-H...N hydrogen bond. In the crystal, dimeric aggregates mediated by N-H...S bonds are formed, which are linked to the  $Cl^-$  anions by O-H...Cl hydrogen bonds. The four-component aggregates are linked into a three-dimensional structure by C-H...Cl interactions.