

**Table38** The inhibitory effects of compounds **68-79** on the neutrophil superoxide formation (*in vitro*)

Animal: Rat Inducer: fMLP 1  $\mu$  M/5  $\mu$  g/ml cytochalasin B

| Compound         | Conc.<br>( $\mu$ M) | Superoxide Formation              |                 | N |
|------------------|---------------------|-----------------------------------|-----------------|---|
|                  |                     | nmol/10 <sup>6</sup> cells/30mins | (%inh)          |   |
| Control          |                     | 1.14 $\pm$ 0.10                   | --              | 3 |
| <b>68</b>        | 30                  | 0.98 $\pm$ 0.15                   | 5.3 $\pm$ 4.2   | 3 |
|                  | 100                 | 0.93 $\pm$ 0.06                   | 8.4 $\pm$ 4.8   | 3 |
| <b>69</b>        | 30                  | 0.85 $\pm$ 0.11                   | 17.7 $\pm$ 1.6  | 3 |
|                  | 100                 | 0.94 $\pm$ 0.08                   | 7.5 $\pm$ 2.3   | 3 |
| <b>70</b>        | 30                  | 0.80 $\pm$ 0.14 *                 | 23.3 $\pm$ 5.5  | 3 |
|                  | 100                 | 0.76 $\pm$ 0.09 *                 | 25.5 $\pm$ 2.5  | 3 |
| <b>71</b>        | 30                  | 0.67 $\pm$ 0.20 **                | 36.7 $\pm$ 15.6 | 3 |
|                  | 100                 | 0.80 $\pm$ 0.07 *                 | 21.9 $\pm$ 2.0  | 3 |
| <b>72</b>        | 30                  | 0.65 $\pm$ 0.12 **                | 37.6 $\pm$ 4.9  | 3 |
|                  | 100                 | 0.93 $\pm$ 0.18                   | 10.3 $\pm$ 8.3  | 3 |
| <b>73</b>        | 30                  | 0.68 $\pm$ 0.06 **                | 37.1 $\pm$ 3.7  | 3 |
|                  | 100                 | 0.66 $\pm$ 0.11 **                | 36.1 $\pm$ 5.3  | 3 |
| <b>74</b>        | 30                  | 1.69 $\pm$ 0.16 **                | -36.3 $\pm$ 9.1 | 3 |
|                  | 100                 | 2.18 $\pm$ 0.38 **                | -70.8 $\pm$ 8.8 | 3 |
| <b>75</b>        | 30                  | 0.82 $\pm$ 0.05 **                | 33.3 $\pm$ 5.1  | 3 |
|                  | 100                 | 0.85 $\pm$ 0.09 **                | 31.7 $\pm$ 5.7  | 3 |
| <b>76</b>        | 30                  | 0.86 $\pm$ 0.13 **                | 31.7 $\pm$ 2.0  | 3 |
|                  | 100                 | 0.86 $\pm$ 0.14 **                | 31.9 $\pm$ 3.4  | 3 |
| <b>77</b>        | 30                  | 1.08 $\pm$ 0.18                   | 14.6 $\pm$ 5.1  | 3 |
|                  | 100                 | 1.32 $\pm$ 0.19                   | -5.5 $\pm$ 7.1  | 3 |
| <b>78</b>        | 30                  | 0.89 $\pm$ 0.19 **                | 30.3 $\pm$ 8.4  | 3 |
|                  | 100                 | 0.86 $\pm$ 0.14 **                | 31.7 $\pm$ 3.5  | 3 |
| <b>79</b>        | 30                  | 0.76 $\pm$ 0.08 **                | 37.8 $\pm$ 7.1  | 3 |
|                  | 100                 | 0.80 $\pm$ 0.09 **                | 34.9 $\pm$ 9.3  | 3 |
| <b>TFP</b>       | 3                   | 0.95 $\pm$ 0.11                   | 11.0 $\pm$ 2.5  | 3 |
|                  | 10                  | 0.59 $\pm$ 0.09 **                | 44.8 $\pm$ 3.9  | 3 |
|                  | 30                  | 0.07 $\pm$ 0.03 **                | 92.6 $\pm$ 3.8  | 3 |
| IC <sub>50</sub> |                     | 14.6 $\pm$ 1.0                    |                 |   |

N=3 ; \* P<0.05, \*\* P<0.01 ; TFP:Trifluoperazine (positive control)

**Table 39** The inhibitory effects of compounds **80-82, 124-138** on the neutrophil superoxide formation (*in vitro*)

Animal: Rat Inducer: fMLP 0.3  $\mu$  M/5  $\mu$  g/ml cytochalasin B

| Compound   | ( $\mu$ M) | Superoxide Formation              |                  |   |
|------------|------------|-----------------------------------|------------------|---|
|            |            | nmol/10 <sup>6</sup> cells/30mins | (%inh.)          | N |
| Control    |            | 1.02 $\pm$ 0.10                   | --               | 3 |
| <b>80</b>  | 10         | 1.06 $\pm$ 0.09                   | -3.9 $\pm$ 3.1   | 3 |
|            | 30         | 1.31 $\pm$ 0.13                   | -29.4 $\pm$ 2.1  | 3 |
| <b>81</b>  | 10         | 0.82 $\pm$ 0.13                   | 20.6 $\pm$ 7.4   | 3 |
|            | 30         | 0.66 $\pm$ 0.05 *                 | 33.9 $\pm$ 6.3   | 3 |
| <b>82</b>  | 10         | 0.83 $\pm$ 0.16                   | 20.4 $\pm$ 9.9   | 3 |
|            | 30         | 0.81 $\pm$ 0.08                   | 26.6 $\pm$ 8.9   | 3 |
| <b>124</b> | 10         | 0.86 $\pm$ 0.06                   | 8.6 $\pm$ 8.5    | 3 |
|            | 30         | 0.86 $\pm$ 0.16                   | 17.4 $\pm$ 9.3   | 3 |
| <b>125</b> | 10         | 0.73 $\pm$ 0.07                   | 29.2 $\pm$ 1.2   | 3 |
|            | 30         | 0.63 $\pm$ 0.11                   | 45.1 $\pm$ 10.4  | 3 |
| <b>126</b> | 10         | 0.88 $\pm$ 0.10                   | 13.3 $\pm$ 7.1   | 3 |
|            | 30         | 0.79 $\pm$ 0.13                   | 24.1 $\pm$ 7.5   | 3 |
| <b>127</b> | 10         | 0.77 $\pm$ 0.06                   | 23.1 $\pm$ 8.7   | 3 |
|            | 30         | 1.36 $\pm$ 0.19                   | -33.1 $\pm$ 13.7 | 3 |
| <b>128</b> | 10         | 0.94 $\pm$ 0.20                   | 4.4 $\pm$ 4.4    | 3 |
|            | 30         | 0.61 $\pm$ 0.13 **                | 42.1 $\pm$ 9.0   | 3 |
| <b>129</b> | 10         | 0.95 $\pm$ 0.12                   | 8.3 $\pm$ 6.7    | 3 |
|            | 30         | 0.77 $\pm$ 0.02                   | 22.6 $\pm$ 8.9   | 3 |
| <b>130</b> | 10         | 0.96 $\pm$ 0.04                   | 6.3 $\pm$ 3.3    | 3 |
|            | 30         | 0.82 $\pm$ 0.10                   | 18.9 $\pm$ 11.7  | 3 |
| <b>131</b> | 10         | 0.89 $\pm$ 0.06                   | 12.6 $\pm$ 5.4   | 3 |
|            | 30         | 1.29 $\pm$ 0.08                   | -26.7 $\pm$ 8.0  | 3 |
| <b>132</b> | 10         | 0.97 $\pm$ 0.11                   | 5.3 $\pm$ 9.4    | 3 |
|            | 30         | 0.99 $\pm$ 0.04                   | 3.1 $\pm$ 2.7    | 3 |
| <b>133</b> | 10         | 1.08 $\pm$ 0.07                   | - 5.5 $\pm$ 5.8  | 3 |
|            | 30         | 0.82 $\pm$ 0.07                   | 19.0 $\pm$ 8.8   | 3 |
| <b>134</b> | 10         | 0.81 $\pm$ 0.13                   | 20.4 $\pm$ 12.8  | 3 |
|            | 30         | 0.78 $\pm$ 0.06                   | 24.1 $\pm$ 6.7   | 3 |
| <b>135</b> | 10         | 1.02 $\pm$ 0.07                   | - 0.1 $\pm$ 8.7  | 3 |
|            | 30         | 0.88 $\pm$ 0.09                   | 14.5 $\pm$ 8.1   | 3 |
| <b>136</b> | 10         | 0.76 $\pm$ 0.08 *                 | 26.3 $\pm$ 7.4   | 3 |
|            | 30         | 0.69 $\pm$ 0.04 *                 | 32.3 $\pm$ 4.2   | 3 |
| <b>137</b> | 10         | 0.69 $\pm$ 0.11 *                 | 31.8 $\pm$ 12.6  | 3 |
|            | 30         | 0.56 $\pm$ 0.01 **                | 42.8 $\pm$ 0.4   | 3 |
| <b>138</b> | 10         | 0.90 $\pm$ 0.06                   | 11.6 $\pm$ 7.4   | 3 |
|            | 30         | 0.72 $\pm$ 0.04 *                 | 31.2 $\pm$ 3.9   | 3 |
| <b>TFP</b> | 3          | 0.78 $\pm$ 0.11                   | 11.0 $\pm$ 2.5   | 3 |
|            | 10         | 0.49 $\pm$ 0.09 **                | 44.8 $\pm$ 3.9   | 3 |
|            | 30         | 0.06 $\pm$ 0.03 **                | 92.6 $\pm$ 3.8   | 3 |

IC<sub>50</sub> ( $\mu$  M) 14.6  $\pm$  1.0

N=3 ; \* P<0.05, \*\* P<0.01 ; TFP:Trifluoperazine (positive control)