

$$\begin{aligned}
& \frac{1/3\langle 13\rangle\langle 34\rangle\langle 46\rangle^2}{\langle 14\rangle^2\langle 23\rangle\langle 56\rangle s_{123}} + \\
& \frac{1/2\langle 13\rangle\langle 34\rangle\langle 46\rangle\langle 4|1+6|5]}{\langle 14\rangle^2\langle 23\rangle\Delta_{14|23|56}} + \\
& \frac{-1[23]\langle 34\rangle^2\langle 6|1+4|5](s_{123}-s_{234})}{\langle 14\rangle\Delta_{14|23|56}^2} + \\
& \frac{1/4\langle 13\rangle\langle 34\rangle\langle 46\rangle^2(s_{23}-s_{56})}{\langle 14\rangle^2\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}} + \\
& \frac{\langle 34\rangle\langle 46\rangle(s_{123}-s_{234})(s_{23}-s_{56})(3/8[12][45]+5/8[14][25])}{\langle 14\rangle[14]\Delta_{14|23|56}^2} + \\
& \frac{\langle 4|2+3|1][25](s_{23}-s_{56})(-5/8\langle 13\rangle\langle 6|2+3|1]-5/8\langle 23\rangle[24]\langle 46\rangle)}{\langle 14\rangle[14]\Delta_{14|23|56}^2} + \\
& \frac{-3/16\langle 36\rangle^2\langle 4|2+3|1](s_{123}-s_{234})(s_{25}+s_{26}+s_{35}+s_{36})}{\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}^2} + \\
& \frac{[25]\langle 34\rangle(s_{123}-s_{234})(-3/4[13]\langle 36\rangle-5/8[14]\langle 46\rangle+3/8[12]\langle 26\rangle)}{\Delta_{14|23|56}^2} + \\
& \frac{5/4[25]\langle 34\rangle\langle 4|2+3|1]\langle 6|1+5|4]}{\Delta_{14|23|56}^2} + \\
& \frac{1\langle 34\rangle\langle 46\rangle\langle 3|1+2|5]}{\langle 14\rangle\langle 23\rangle\langle 56\rangle[56]s_{123}} + \\
& \frac{1[12]\langle 34\rangle[45]\langle 46\rangle}{\langle 14\rangle[14]\Delta_{14|23|56}} + \\
& \frac{-5/4\langle 34\rangle\langle 46\rangle\langle 3|1+2|5]}{\langle 14\rangle\langle 23\rangle\Delta_{14|23|56}} + \\
& \frac{-1\langle 34\rangle\langle 46\rangle^2\langle 3|1+2|4]}{\langle 14\rangle\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}} + \\
& \frac{1/4\langle 34\rangle^2[45]\langle 4|1+6|5]}{\langle 14\rangle\langle 23\rangle[56]\Delta_{14|23|56}} + \\
& \frac{3/4\langle 34\rangle\langle 36\rangle\langle 46\rangle(s_{14}-s_{56})}{\langle 14\rangle\langle 23\rangle\langle 56\rangle\Delta_{14|23|56}} + \\
& \frac{-1/4\langle 34\rangle\langle 36\rangle\langle 4|2+3|5](s_{14}-s_{56})}{\langle 14\rangle\langle 23\rangle\langle 56\rangle[56]\Delta_{14|23|56}} + \\
& \frac{-11/4[25]\langle 34\rangle\langle 46\rangle}{\langle 14\rangle\Delta_{14|23|56}} + \\
& \frac{\langle 46\rangle^2(-1/2[24]\langle 34\rangle+1/2\langle 3|1+4|2])}{\langle 14\rangle\langle 56\rangle\Delta_{14|23|56}} + \\
& \frac{1/4[25]\langle 34\rangle\langle 46\rangle(s_{23}-s_{56})}{\langle 14\rangle\langle 56\rangle[56]\Delta_{14|23|56}} + \\
& \frac{1/2[14][25]\langle 34\rangle\langle 46\rangle}{\langle 56\rangle[56]\Delta_{14|23|56}} + \\
& (123456 \rightarrow \overline{-432165}) + \\
& \frac{35/32\langle 3|1+4|2]\langle 4|2+3|1]\langle 6|1+4|5](s_{25}+s_{26}+s_{35}+s_{36})(s_{123}-s_{234})}{\Delta_{14|23|56}^3}
\end{aligned}$$