$$\frac{[12]^2\langle 12\rangle\langle 2|\mathbf{3}|1]m_t^2(9/8\langle 12\rangle\langle\mathbf{34}\rangle+9/16\langle\mathbf{31}\rangle\langle\mathbf{24}\rangle)}{\Delta^2_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{\langle 2|\mathbf{3}|1]m_t[12]\langle 12\rangle(9/16\langle\mathbf{3}|1+2|\mathbf{4}\rangle\langle 1|\mathbf{3}|1]+9/16\langle\mathbf{3}|2|\mathbf{3}|1+2|\mathbf{4}]\rangle}{\Delta^2_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{m_t(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3})-2m_t^2\mathrm{tr}(1+2|\mathbf{4}))(3/32\langle\mathbf{32}\rangle[\mathbf{14}\rangle\langle 2|\mathbf{3}|2]\ldots\langle\langle 6\text{ terms}\rangle\rangle\ldots+3/4\langle\mathbf{32}\rangle[\mathbf{14}]\mathrm{tr}(\mathbf{3}|\mathbf{4})-3/4\langle\mathbf{32}\rangle[\mathbf{14}]m_t^2)}{\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3})-2m_t^2\mathrm{tr}(1+2|\mathbf{4}))(-3/32\langle\mathbf{3}|\mathbf{4}|1\rangle\langle\mathbf{24}\rangle\langle 2|\mathbf{3}|2]\ldots\langle\langle 3\text{ terms}\rangle\rangle\ldots+3/32\langle 2|\mathbf{3}|1]\langle\mathbf{14}\rangle\langle\mathbf{3}|\mathbf{4}|1])}{\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{3/32\langle\mathbf{34}\rangle\langle 2|\mathbf{3}|1](\mathrm{tr}(1+2|\mathbf{3})\mathrm{tr}(1+2|\mathbf{4})-2s_{\mathbf{12}}\mathrm{tr}(\mathbf{3}|\mathbf{4}))\mathrm{tr}(\mathbf{3}|\mathbf{4})}{\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{-3/16\langle\mathbf{32}\rangle\langle 2|\mathbf{3}|\mathbf{4}]m_t(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3})-2m_t^2\mathrm{tr}(1+2|\mathbf{4}))\langle 1|\mathbf{3}|1]}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{3/16[\mathbf{3}|\mathbf{4}|1\rangle\langle\mathbf{24}\rangle m_t(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3})-2m_t^2\mathrm{tr}(1+2|\mathbf{4}))\langle 2|\mathbf{3}|1]}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{\langle 2|\mathbf{3}|\mathbf{4}|2\rangle m_t(\mathrm{tr}(1+2|\mathbf{3})\mathrm{tr}(1+2|\mathbf{4})-2s_{\mathbf{12}}\mathrm{tr}(\mathbf{3}|\mathbf{4}))(-3/8\langle\mathbf{24}\rangle[\mathbf{32}]-3/8[\mathbf{31}\rangle\langle\mathbf{14}\rangle)}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3})-2m_t^2\mathrm{tr}(1+2|\mathbf{4}))(3/16\langle\mathbf{34}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\langle 2|\mathbf{3}|2]-3/16\langle\mathbf{24}\rangle\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle\mathbf{32}\rangle\langle 1|\mathbf{3}|1])}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{[\mathbf{34}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle(\mathrm{tr}(\mathbf{3}|\mathbf{4})\mathrm{tr}(1+2|\mathbf{3})-2m_t^2\mathrm{tr}(1+2|\mathbf{4}))(3/16\langle 2|\mathbf{3}|2]+3/16\langle 1|\mathbf{3}|1])}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{45}}\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{\langle\mathbf{32}\rangle m_t(3/2\langle 2|\mathbf{3}|\mathbf{4}|2\rangle[\mathbf{24}]\ldots\langle\langle 4\text{ terms}\rangle\rangle\ldots+3/4[\mathbf{14}]\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle 12\rangle)}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$\frac{(3/4\langle 1|\mathbf{3}|\mathbf{4}|2\rangle\langle\mathbf{24}\rangle\langle\mathbf{3}|\mathbf{4}|1]+3/4\langle\mathbf{14}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\langle\mathbf{3}|\mathbf{4}|1]+3/2\langle\mathbf{34}\rangle\langle 2|\mathbf{3}|\mathbf{4}|2\rangle\langle 2|\mathbf{3}|2])}{\langle 12\rangle\Delta_{12|\mathbf{3}|\mathbf{4}|\mathbf{5}}}+$$

$$(12345\to 12435)+$$

$$(12345\to\overline{21345})+$$

$$(12345\to\overline{21435})+$$

$$\frac{[12]m_t^2(s_{\mathbf{13}}-s_{\mathbf{23}})(-3/4\langle 12\rangle\langle\mathbf{34}\rangle-3/4\langle\mathbf{31}\rangle\langle\mathbf{24}\rangle)}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{-3/4[\mathbf{31}\rangle\langle 12\rangle[\mathbf{24}]m_t^2(s_{\mathbf{13}}-s_{\mathbf{23}})}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{\langle\mathbf{32}\rangle[\mathbf{24}]m_t(s_{\mathbf{13}}-s_{\mathbf{23}})(3/4\langle 1|\mathbf{3}|1]-1/6\langle 12\rangle[12])}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{-3/4[\mathbf{31}\rangle\langle 12\rangle[2|\mathbf{3}|\mathbf{4}\rangle m_t(s_{\mathbf{13}}-s_{\mathbf{23}})}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{-7/12\langle\mathbf{31}\rangle\langle\mathbf{14}\rangle[12]\langle 2|\mathbf{3}|1](s_{\mathbf{13}}-s_{\mathbf{23}})}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{-1/6[\mathbf{31}\rangle\langle 12\rangle[\mathbf{24}]\langle 2|\mathbf{3}|2](s_{\mathbf{13}}-s_{\mathbf{23}})}{\langle 1|\mathbf{3}|2]\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{-2/3[\mathbf{14}|\langle\mathbf{32}\rangle m_t}{\langle 12\rangle[12](s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{-23/6[\mathbf{31}\rangle\langle\mathbf{24}\rangle m_t}{\langle 12\rangle[12](s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{\langle\mathbf{32}\rangle(-23/6[1|\mathbf{3}|\mathbf{4}\rangle-3/2[12]\langle\mathbf{24}\rangle)}{\langle 12\rangle[12](s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{[\mathbf{31}](-1/2\langle 2|\mathbf{3}|\mathbf{4}]+7/6\langle 12\rangle[\mathbf{14}])}{\langle 12\rangle[12](s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{[\mathbf{14}|\langle\mathbf{32}\rangle m_t(1/24\langle 2|\mathbf{3}|2]-65/24\langle 12\rangle[12]+1/24\langle 1|\mathbf{3}|1])}{\langle 12\rangle[12]\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{-13/24[\mathbf{31}\rangle\langle\mathbf{24}\rangle m_t}{\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{(37/24\langle\mathbf{34}\rangle\langle 2|\mathbf{3}|1]\mathrm{tr}(1+2|\mathbf{3})+19/24\langle 12\rangle\langle\mathbf{34}\rangle[12\rangle\langle 2|\mathbf{3}|1]+23/24\langle\mathbf{3}|1+2|\mathbf{3}|2]\langle 12\rangle\langle\mathbf{24}\rangle)}{\langle 12\rangle[12]\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{(-1/24\langle 2|\mathbf{3}|1]\langle 12\rangle[12|\mathbf{34}]+17/24[\mathbf{34}\rangle\langle 2|\mathbf{3}|1]\mathrm{tr}(1+2|\mathbf{3})-7/8[\mathbf{31}\rangle\langle 12\rangle[\mathbf{14}]\mathrm{tr}(1+2|\mathbf{3}))}{\langle 12\rangle[12]\Delta_{12|\mathbf{3}|\mathbf{45}}}+$$

$$\frac{m_t\langle 2[\mathbf{14}]\langle\mathbf{32}\rangle\langle 2|\mathbf{3}|2]\ldots\langle\langle 3\text{ terms}\rangle\rangle\ldots+1/2\langle\mathbf{31}\rangle[\mathbf{14}]\langle 2|\mathbf{3}|1])}{\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{m_t(-1/3[\mathbf{31}\rangle\langle 12\rangle[12\rangle\langle\mathbf{24}\rangle+1/6[\mathbf{3}|\mathbf{4}|2\rangle[1|\mathbf{3}|\mathbf{4}\rangle+1/6[\mathbf{31}\rangle\mathrm{tr}(\mathbf{3}|\mathbf{4})\langle\mathbf{24}\rangle)}{\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{(19/6m_t^2\langle\mathbf{34}\rangle\langle 2|\mathbf{3}|1]-1/6\langle 2|\mathbf{4}|1]\langle\mathbf{34}\rangle m_t^2-7/6\langle\mathbf{31}\rangle\langle 2|\mathbf{3}|1][12]\langle\mathbf{24}\rangle)}{\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$\frac{-1/3[\mathbf{31}\rangle\langle 1|\mathbf{3}|1]\langle 12\rangle[1\mathbf{4}]}{\Delta_{12|\mathbf{3}|\mathbf{45}}(s_{\mathbf{123}}-m_t^2)}+$$

$$(12345\to\overline{21435})$$